

THE NATIONAL Provisioner

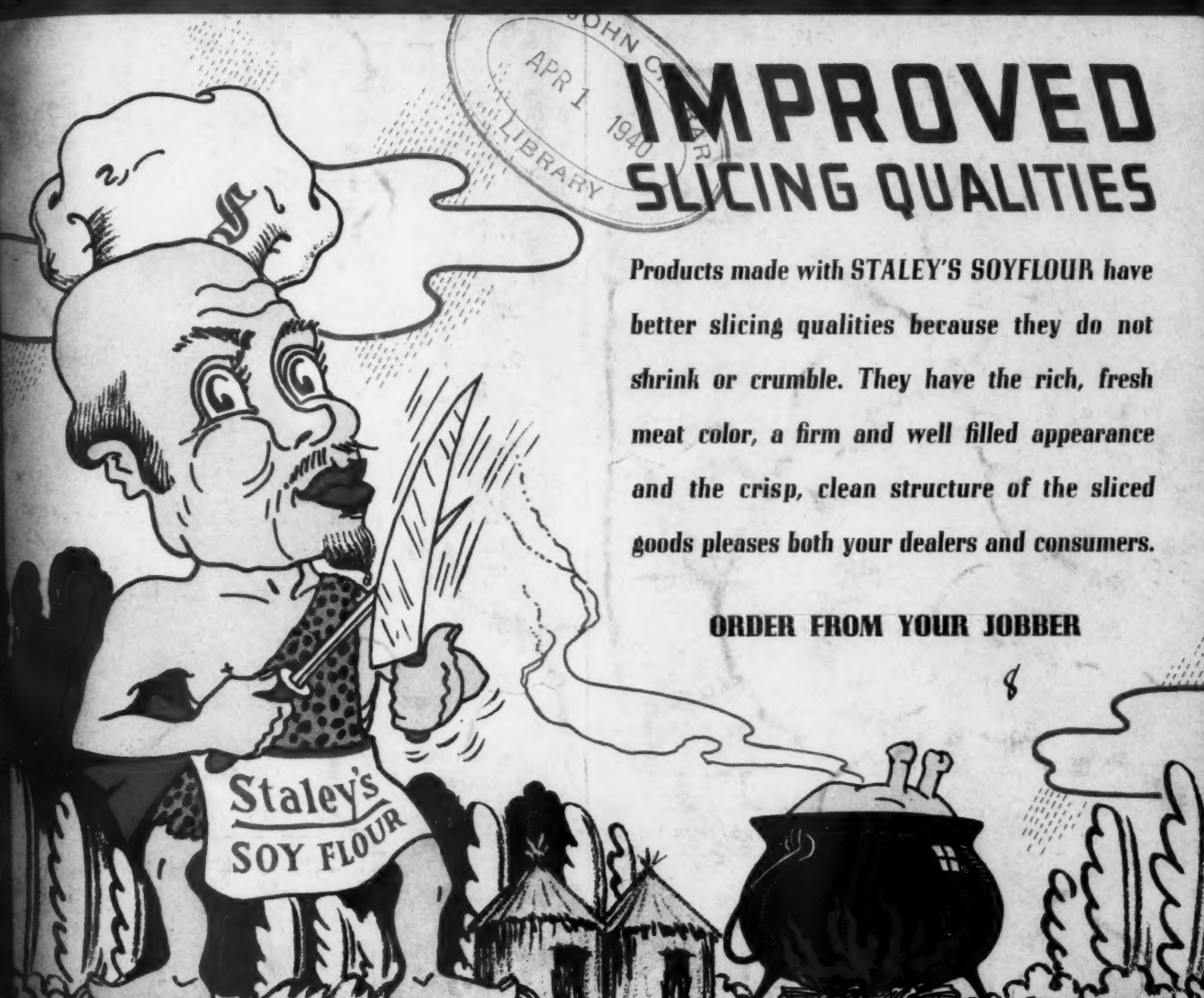
THE MAGAZINE OF THE

Meat Packing and Allied Industries

Volume 102

MARCH 30, 1940

Number 13



IMPROVED SLICING QUALITIES

Products made with STALEY'S SOYFLOUR have better slicing qualities because they do not shrink or crumble. They have the rich, fresh meat color, a firm and well filled appearance and the crisp, clean structure of the sliced goods pleases both your dealers and consumers.

ORDER FROM YOUR JOBBER



Staley's SOYFLOUR

ESPECIALLY PROCESSED FOR MEAT PACKERS
by A-E-STALEY MFG. CO. DECATUR, ILL.

VACUUM MIXING...

*Saves time
Eliminates spoilage
Improves quality*

INCREASES PROFITS!



AIR EMPTYING DEVICE SAVES TIME

All new BUFFALO Vacuum and Standard Mixers can be equipped with this efficient labor saving device. A turn of the lever tilts or returns the tub with complete control.

Removes Air Pockets

1. Delays bacterial action from oxygen, the cause of spoilage.
2. Sausage stands up longer in storage.
3. Dealers can order larger quantities, lowering your delivery costs.
4. Improves color of finished products.

Makes Emulsion Firm, Stiff, Compact

1. Saves casings: Since more weight in meat is stuffed into casings—savings run as high as 15 to 20%.
2. Improves quality: Perfectly blended stiff emulsion binds together firmly.
3. Increases yours and dealers' sales, since sausage is often ordered by casings—not by weight.

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44 Hobomack Rd., Quincy, Mass.
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BUFFALO VACUUM MIXERS

THE
SAUSAGE
 WITH THE
GOOD COLOR
SURE
SELLS
FAST!

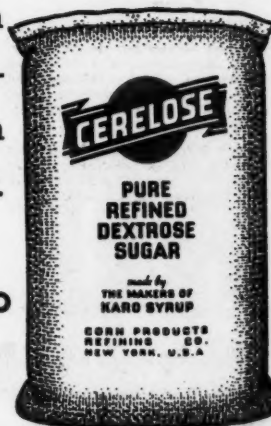


Cerelose, pure Dextrose sugar, protects the desired color in fresh sausage. In all kinds of sausage Cerelose helps develop that good color. Meat packers are enthusiastic in their praise of Cerelose. They also appreciate its economy.

For further information write

CORN PRODUCTS SALES CO. • 333 NO. MICHIGAN AVE., CHICAGO

CERELOSE
 PURE DEXTROSE SUGAR



THE NATIONAL PROVISIONER

The Magazine of the Meat Packing and Allied Industries



Official Organ Institute of American Meat Packers

Volume 102

MARCH 30, 1940

Number 13

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DAILY MARKET SERVICE

(Mail and Wire)

E. T. NOLAN

C. H. BOWMAN

Editors

The National Provisioner Daily Market Service reports daily market transactions and prices on provisions, lard, tallow and greases, sausage materials, hides, cottonseed oil, Chicago hog markets, etc.

For information on rates and service address The National Provisioner Daily Market Service, 407 So. Dearborn st., Chicago.

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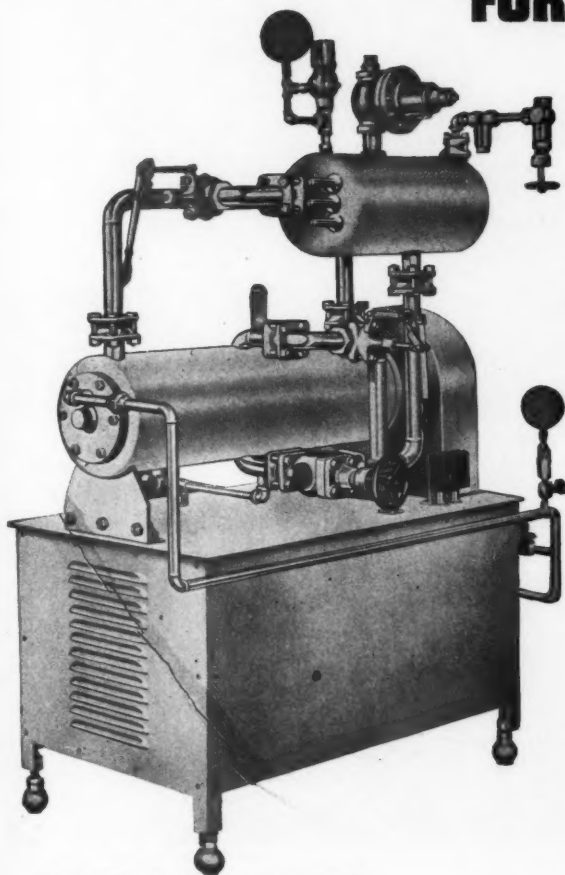
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TWO CENTS PER POUND **MORE** FOR VOTATOR-MADE LARD!



Above: The Junior Votator, requiring only about 20 square feet of floor space, has a capacity of from 3000 to 4000 pounds of lard per hour. Uses only 10 H. P. motor, and requires far less refrigeration than any other chilling system.

Since installing a Votator several months ago, a well-known Southern packer has consistently been getting from one to two cents per pound *more* for his lard. And that premium is all "gravy", too—for it costs no more (in fact, a little less) to make lard in this *modern* way.

Some packers may believe that lard is "just lard". Others know that there are "lards and lards", and that the *right kind*—the pure, white, creamy-textured kind that the Votator turns out—can be marketed at a much better profit.

Perhaps the Votator is what *you* need to make *your* lard department more profitable. In any event, it costs nothing to investigate, and we'll welcome an opportunity to give you all the details. Write today! *Address:*

VOGT PROCESSES

*A Division of the Girdler Corporation, Incorporated
Louisville, Kentucky*

The JUNIOR **VOTATOR**

***A Continuous, Controlled, Closed-System
Method for Production of Highest-Quality Lard
and Vegetable Shortening***



"Things look pretty good for us so far this year, John."

"Yes, we certainly have a better product than we ever had before and I believe that's the biggest factor in our sales gains. Since we started using Stange Products we haven't had a complaint from the sales department and the boys in the production department swear by them. I'm convinced that Stange's 'Laboratory Control' is the real key to product uniformity."

WM. J.

Stange

Soluble Seasonings • Peacock Brand Certified Food Colors
Branding Inks • Nitrite Tablets • Curing Tablets

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Saving Money Is Important To Every Packer!

Adelmann Ham Boilers win every competitive test. The list of users includes the shrewdest operators in the industry. *And with good reason!*

Adelmann Ham Boilers are easiest to handle, quickest to operate, reduce shrinkage, and lower operation costs. They are simple to clean, last longer, perform better, and produce the kind of boiled hams that really *sell!*

Elliptical yielding springs eliminate cover tilting—exert a firm, wide, flexible pressure. Perfectly shaped, evenly molded boiled hams always result.

Made of Cast Aluminum, Tinned Steel, Monel Metal, and Nirosta (Stainless) Steel, Adelmann Ham Boilers offer the most complete line available.

Liberal trade-in schedules make it actually *profitable* to dispose of worn, obsolete equipment for new modern Adelmann Ham Boilers. Ask for booklet "The Modern Method" today.

"Adelmann—The kind your ham makers prefer."





THE SMOKE DOES
NO GOOD
'TIL IT PENETRATES

*Make sure your
sausage gets that
"smoky" flavor...use*

ARMOUR'S NATURAL CASINGS

Armour's Natural Casings have a naturally porous texture . . . a texture that permits precisely the smoke penetration you want for your sausages!

And that means much to sales, because it's that "smoky," tangy flavor that has made smoked sausage a million dollar favorite in America.

On top of that advantage is the fact that Armour's Natural Casings are most carefully selected and graded by experts—insuring you minimum breakage.

You'll find, too, that Armour's Natural Casings have a resilient quality that makes them cling tightly to the sausage meat at all times, giving it a fresh, well-filled appearance. And looks are important!

All in all, we believe Armour's Natural Casings to be your logical choice. Phone your Armour Branch House for up-to-the-minute quotations and fast, efficient service.

ARMOUR AND COMPANY

Institute Launches

That Good

You've liked it cold . . .



CHICKEN STEWED with LIVER SAUSAGE—Spoon 1/2 cup of the liver
1/2 cup liver sausage, cut in bits
1/2 cup milk
1/2 cup cream
1/2 cup butter
1/2 cup flour
1/2 cup onion
1/2 cup celery
1/2 cup carrots
1/2 cup potatoes
1/2 cup peas
1/2 cup corn
1/2 cup beans
1/2 cup lentils
1/2 cup chickpeas
1/2 cup garbanzo beans
1/2 cup kidney beans
1/2 cup pinto beans
1/2 cup black beans
1/2 cup navy beans
1/2 cup lima beans
1/2 cup soybeans
1/2 cup mung beans
1/2 cup adzuki beans
1/2 cup lentils
1/2 cup chickpeas
1/2 cup garbanzo beans
1/2 cup kidney beans
1/2 cup pinto beans
1/2 cup black beans
1/2 cup navy beans
1/2 cup lima beans
1/2 cup soybeans
1/2 cup mung beans
1/2 cup adzuki beans

Liver Sausage

Now you'll like it hot!

NOTE: Many house and have it as "That Good Liver Sausage"



LIVER SAUSAGE with POTATOES
LIVER SAUSAGE with SPAGHETTI
LIVER SAUSAGE with TOASTED BREAD

Liver Sausage Campaign

NOW for liver sausage!

Following closely upon the successful campaign devoted to pork sausage links, the second big sausage advertising promotional drive, sponsored by the Institute of American Meat Packers, will begin the latter part of April, inaugurated by the first of two large, colorful, appetizing advertisements in *Life* magazine.

The first of the *Life* advertisements, a two-page spread in natural color, is reproduced in black and white on this page. It will appear in the April 29 issue. Three weeks later, in the May 20 issue, the second advertisement will appear. This will be a full page, also in natural color.

Both advertisements will feature the healthful qualities and taste appeal of liver sausage. The opening advertisement, for the first time in an advertising promotional campaign, focuses attention on the fact that liver sausage makes delicious and tasty dishes when served hot, as well as cold.

The advertising will be complemented by publicity and home economics material to be issued by the Institute and the National Live Stock and Meat

Board for newspapers and other publications. Information already is being distributed to retail trade papers and hotel and restaurant publications. Letters announcing the theme of the campaign are being forwarded to manufacturers of products commonly served with liver sausage, and also to railroads and other organizations which cooperated so splendidly and wholeheartedly with the pork sausage link advertising campaign.

The new campaign is specifically timed to help sausage makers, retail meat dealers, and others cash in on one of the industry's most profitable sausage items. Now is the time of year when housewives' interest naturally turns to suggestions for new and appetizing menu combinations. The liver sausage campaign is designed to capitalize on the housewife's desire to pep up her menus by serving something new and entirely different.

As in the pork sausage link campaign, advertisements are being run in several prominent retail publications which reach practically every independent, chain store, or cooperative chain store dealer in the country. Helpful ideas and sugges-

tions will be passed along to the dealer in these advertisements.

Supplementary store advertising material, which ties in closely with the magazine advertising, will be distributed by members of the Institute to retail meat dealers throughout the United States. The first piece of store advertising material consists of a large, colorful poster featuring one of the panels of the first advertisement. It will be delivered to dealers about April 22 for display in their stores at the time the first *Life* advertisement appears on the newsstands on Friday, April 26. The second piece of store advertising material, for use in windows, on walls, and over the wire will be distributed about May 13, for use during the period when the second *Life* advertisement appears on Friday, May 17.

How Campaign Will Operate

Along with the first poster, there also will be distributed a folder describing the campaign, which contains many helpful suggestions on how dealers can cash in on the program by using the point-of-sale advertising material in combination with their own individual store displays. The Institute now is making arrangements for this material to be distributed by its member companies, and more than 500 local chairmen throughout the country.

Much of the same organization that functioned so successfully in the pork sausage link program will handle the liver sausage campaign. Meat packers and sausage makers will be provided a folder outlining the many different ways in which they can tie in closely with the institutional advertising and promotional material being prepared by the Institute. The folder will contain sample advertisements and suggestions on how they can economically prepare their own advertising material.

In addition, there will be news statements which can be adapted by meat packers to local situations, and considerable other material which should help the meat packer and sausage maker increase sales and profits on liver sausage. Radio talks, service club talks, local news stories and other material will be sent to the Institute's local chairmen as an aid in putting the campaign over the top in each community.

Slide Film to Aid Packer

A feature of the liver sausage campaign, which will enable the meat packer to inform his own sales organization of its magnitude, is a sausage "talkie" slide film now available from the Institute. This film is designed to help the meat packer sell the campaign to his own sales organization. It follows the general tenor of the presentation of the liver sausage campaign as made by the Institute's advertising agency to committees of the Institute directly concerned with the promotion—the Casings Committee and the Sausage Committee.

The film explains the entire campaign in detail in a vigorous, entertaining and

helpful way. It not only shows the size and organization of the campaign, but also outlines various sales approaches which should be helpful in selling it to retailers. The film now is available from the Institute at cost price. Further information can be obtained by writing the Institute's Advertising Department.

Highly Profitable Drive Seen

Home economics material for newspapers and radio was one of the important features of the pork sausage link campaign. Housewives all over the country were advised how they could serve new, different, and tasty pork sausage dishes. These stories undoubtedly created a consumer interest in pork sausage which resulted in greater sales.

This type of material will be handled on an even broader scale during the liver sausage program. The health value of liver sausage, the many appetizing ways in which it can be prepared, photographs of liver sausage dishes, and other information of general interest to the housewife will be issued by the Institute and the National Live Stock and Meat Board. Although it is

yet too early to estimate the number of millions of readers reached during the pork sausage campaign, clippings from hundreds of newspapers already have come to the attention of the Institute.

There is reason to believe, the Institute points out, that the campaign to increase sales of liver sausage probably will be even more successful than the pork sausage link program. Sales reports from Institute members indicate a substantial increase in sausage sales in February this year as compared to the same month a year ago, and figures released by the Bureau of Animal Industry show that the production of all pork sausage during February increased about 25 per cent over a year ago. Although some of this increase probably would have occurred, much of it undoubtedly can be attributed to the success of the pork sausage link advertising campaign.

With the Institute enlisting the cooperation of hotels, restaurants, railroads, and manufacturers of foods commonly served with liver sausage, every possible effort is being made to increase consumer interest in liver sausage. Liver sausage sales history should be made during May.



NO REFRIGERATION NEEDED

New 3-lb. hermetically sealed can being used for Swift's Silverleaf lard may be displayed in shortening section of store. It features a handy hinged lid.

NEW SWIFT LARD CONTAINER

An attractive lithographed, hermetically sealed 3-lb. lard can, which permits display of lard in the shortening section of the grocery store as well as in the meat department, has been developed by Swift & Company for Silverleaf brand pure lard, and is being currently introduced in Chicago and Eastern cities.

Measuring approximately 5 in. in diameter and 6 in. high, the container features a hinged lid, opened by means of a key. In order to close the container,

the housewife has only to push the hinged lid back into position.

White lettering against a blue label and white background is used on the can. On the side opposite the label appear recipes for cakes, pastry, baking powder biscuits and doughnuts, supplemented by line drawings. The product is recommended on the can for all shortening uses.

The difficulty of displaying lard in conventional containers advantageously, where it can compete on an equal basis with other shortenings, is recognized as a principal obstacle to increased lard sales.

LARD COOKING SCHOOLS

In response to requests of county agents and home economists interested in promoting the sale of lard by means of cooking schools and demonstrations, the National Live Stock and Meat Board has prepared a folio covering the subject.

Designed as an aid to the inexperienced demonstrator and to save effort on the part of the more experienced, the folio contains a complete program, from news releases to folders and booklets for distribution among the audience. The equipment needed, method of enlisting the proper aid, what points should be stressed, recipes for use and a complete illustrated lecture are designed to make the presentation of the program as easy as possible.

The plans, attractively contained in the pockets of the folio along with samples of the booklets used, will be distributed among county agents and demonstrators of the Corn Belt area, and are available for use elsewhere.

New Plan for Wartime Meat Handling

By M. T. ZAROTSCHENZEFF*

AMPLE food supplies are just as important as plentiful ammunition during times of war. Fresh meat represents one of the most important elements of available foods, and effective provisioning of the civilian population, Army and Navy becomes of paramount significance.

Whereas grains, dried and canned foodstuffs are not subject to rapid deterioration, fresh meats must usually be frozen in order to permit effective storage and handling. Frozen meat was a standard item in the supplies of all nations during the last World War.

During the last World War the writer was entrusted by the Russian government with planning and supplying the Russian Army with fresh and chilled meats. As a result, considerable experience of practical nature was gained. The proposal outlined here is based, therefore, largely on this experience coupled with the progress that has been made in the handling and quick-freezing of meats during the past two decades.

World War Practice

The problem of supply may be stated as follows:

Carrying out the regular packing-house operations at the point of production, converting the product into suitable form for storage and shipment, actual shipment, and final distribution at the point of consumption.



During the last World War the common procedure was to take quarters of beef, suitably wrapped and frozen, and to ship and distribute the meat in this form. This method was practically universal in all countries.

Only during the last stages of the war were attempts made to take the quarter of beef and, after boning and trimming, pack it in 100-lb. wooden boxes. This step was certainly a great

improvement. However, with present knowledge and experience, still greater economies and improvements should be effected.

Under the plan to be proposed by the

as large as a 100-lb. wooden box, but a much smaller and more compact unit which will make it possible to distribute the meat more efficiently in final stages. As an important factor in conserving

How Proposed Supply Plan Would Save

Comparison of cost of handling, storing and transporting 200,000 tons of beef under old and new plan, as well as possible saving through by-product utilization:

	PRESENT. 400,000,000 lbs.	PROPOSED. 240,000,000 lbs.*
1.—Total quantity of meat handled.....	400,000,000 lbs.	240,000,000 lbs.*
2.—Cost of freezing entire quantity at $\frac{1}{4}$ c per lb.....	\$1,000,000	\$ 600,000
3.—Cost of storage for an average of three months, $\frac{1}{4}$ c per lb...	2,000,000	1,200,000
4.—Cost of overseas transport at 2c per lb.....	8,000,000	3,600,000†
5.—Storage in England and France, for an average of three months at $\frac{1}{4}$ c per lb.....	2,000,000	1,200,000
6.—Add for extra labor on cutting and packing $\frac{1}{4}$ c, and for packaging materials $\frac{1}{4}$ c, a total of 1c per lb.....	4,000,000	2,400,000
TOTAL COST	\$17,000,000	\$9,000,000
7.—Credit 40 per cent in bones, trimmings and fats, converted to other needs—80,000 tons at an average value of 3c per lb.		\$4,800,000
TOTAL NET COST	\$17,000,000	\$4,200,000
NET SAVING is \$12,800,000.		

*Minus 40 per cent for excess fat, bones, etc.

†Cut meat will be compactly packed, more pounds per cubic foot, and hence lower freight rate of $\frac{1}{4}$ c lb.

writer, full use is made of present experience and knowledge of handling quick-frozen products. The principal aim is to prepare the fresh meat for ultimate consumption as much as possible at the point of production. This means, that instead of shipping a quar-

nutritive elements of meats, the products should be frozen very rapidly and, of course, much more rapidly than is possible with bulky items like beef quarters or 100-lb. boxes.

Modern packaging materials permit great economies in providing an inexpensive container which will protect the fresh, quick-frozen meats from outside elements.

The additional labor required for cutting and packaging, as well as additional cost of such packaging materials, will be more than offset by the savings which may be definitely expressed in dollars and cents, besides numerous other advantages.

Savings and Advantages

The proposed plan is here applied to a hypothetical case. Let us assume that the United Kingdom is importing 200,000 tons of meat from South America during 1940. As an example of the considerable savings possible under such a plan, the following cost estimate has been prepared on the basis of a volume of 200,000 tons of beef. (See table above.)

The Army or government agency will show a real saving in the cost of procuring meats under this plan. The above mentioned figures, while approximate, are still correct in principle and may easily be checked. While the above savings represent very large sums, there are other important advantages, some of which may even outweigh the money considerations.

A.—At least 40 per cent of inedible parts of the carcass are retained in the packing plant and converted to other purposes, thereby preventing waste.

(Continued on page 30.)

FRENCH SOLDIERS SAWING BEEF

Part of the French army in a new war still handles its beef the old World War way. French Alpine troops are shown sawing through a quarter of beef, which is reported to have "been frozen stiff by the frigid temperature of the mountain sector." As the article points out, trimmings, bones and fat from such meat cannot be utilized at the front.

ter of a carcass, or even a 100-lb. box containing large pieces, a more convenient method is recommended.

The proposed plan entails cutting up the meat into three grades: Best cuts; secondary cuts, and trimmings, excess fat, bones, etc. These latter should be left at the point of production for conversion into other products, instead of being largely wasted or actually thrown away at the point of consumption.

Furthermore, the unit should not be

*Technical director, National Frozen Foods, Inc.

Tank Method of Defrosting Frozen Meats

Proves Inexpensive — Prevents Deterioration

MILLIONS of pounds of green pork cuts are sent to the freezers each year during the heavy hog killing season and are later defrosted, cured and smoked when hog runs are comparatively light.

Improvement in defrosting methods has been given much thought and study in recent years—particularly in regard to cutting the cost of the defrosting operation and preventing deterioration of the product, which frequently occurs when thawing is done at cellar temperature or on racks in a high temperature room.

Defrosting in Water

The almost universal practice today in plants where large quantities of pork cuts are defrosted is to use vats in which the meats are thawed under water heated to 90 degs. F. This method has been found to be the safest and to give best results.

Bellies defrosted under water in a room temperature of 50 degs. F. will have an inside temperature of 35 or 40 degs. F. in about four to five hours.

A defrosting tank of this design may be made in any capacity required. The one shown is 50 ft. long, 6 ft. wide and 3 ft. deep. It is divided with a longitudinal partition to provide a channel 92 ft. long.

The tank is built of ¼-in. boiler plate and details of construction can be determined by the boiler making or sheet metal concern which builds it. The water is circulated in the tank by a 16-in. impeller and motor assembly of the type generally employed for ice tank brine circulation.

Impeller is installed in a circular housing located in a compartment at one end of the tank. A slotted partition permits circulation of water through the compartment, but prevents entrance of meat cuts. Steam and water connections, with conveniently located valves, as well as a recording thermometer, are provided to enable the operator to maintain any desired water temperature.

There are some advantages in having a variable speed motor to drive impeller, but it is not essential for satis-

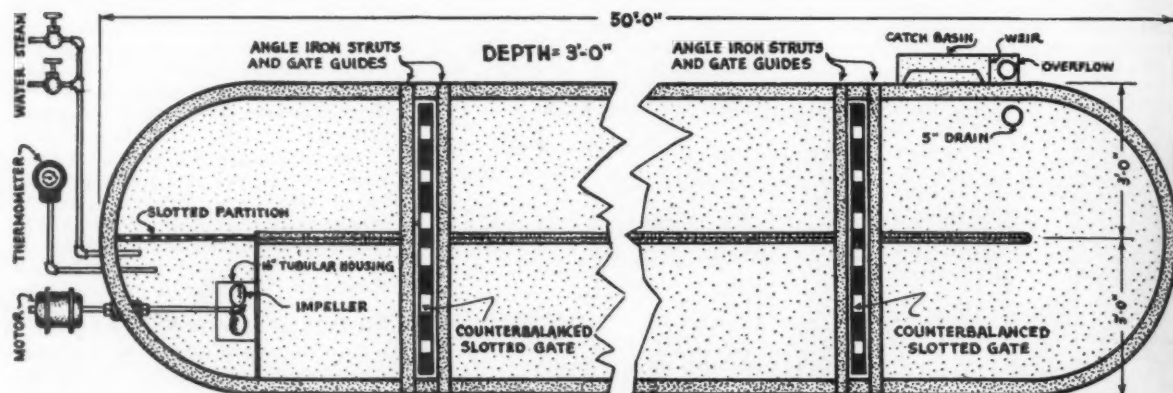
A defrosting tank with the dimensions shown has a capacity of approximately 12,000 to 15,000 lbs. of bellies. It is possible, therefore, to put through the tank an average of 12,000 lbs. per hour, or 96,000 lbs. per 8-hour day. Bellies must be placed in the tank singly to obtain such results.

Method of Operating Tank

The following method of operating the tank is suggested for plants where a large volume of product is handled:

The man in charge stands at the control station (the discharge end) and inspects virtually every piece of meat removed. All controls—steam, water and power—are placed for convenient manipulation at this point. If a variable speed motor is installed, the operator is able to keep the water barely moving over the meats, an ideal condition. If he wants to move the meats ahead to make room for more he has only to speed up the impeller.

A conveyor can be installed to handle the meats from the tank to trucks or to a trimming table. If a conveyor is not



If desired, the water may be drained one hour after defrosting is started and the bellies left in the vat overnight. They will be properly defrosted the next morning. Hams, picnics and butts can be handled in a similar manner. All meats defrosted in water, or a weak brine, if preferred, have good color and shrink little.

Tank Construction

A Chicago packer has improved on water defrosting as usually employed by bringing all factors influencing defrosting time, cost, and results under more close control through the use of the defrosting tank shown in the accompanying illustration. With this tank he is able to thaw a large quantity of meats in much less time than was required formerly. It takes little space.

factory results. Outlet line to sewer is of 5-in. diameter. An overflow is provided by cutting a slot 3 in. deep and 30 in. long in one side of the tank at the maximum water level. A small box with an underflow weir may be used as a catch basin to retain any loose fat.

The gates are made of wood slats. They are required to keep different averages and kinds of cuts separated when defrosting small lots. Defrosting in this tank is practically a continuous process after the first pieces added are ready to be removed. One crew can remove defrosted product while another is placing frozen product in the tank. This is particularly true when defrosting bellies, the lighter averages of which are thawed in 25 to 30 minutes. Heavier averages can be defrosted in less than one hour.

used, the trimming table should be so located that the meats can be transferred with little handling.

Defrosting tank and trimming table should be installed near the curing cellar. The process will never require water warmer than 60 degs. F., so that the heat from the tank will have little or no effect on cellar temperature.

Water Temperatures

Hams are handled as a batch. Tank is loaded to capacity and water is circulated until all hams have been defrosted. From five to six hours are required to defrost medium weight cuts; because of the time required to defrost hams it is advisable to add enough salt to the water to make a 15-deg. brine.

(Continued on page 36.)

"Penny Wise . . . AND POUND FOOLISH"

By G. B. MULLOY

I HAD the opportunity recently to discuss with the president of a medium sized meat packing plant the difference between saving a dollar in the operation of the power plant and earning a dollar through the sale of meat products.

The discussion arose during a consideration of the advisability of investing more money in the power plant to relieve the demand on the plant's power generating equipment, which is approaching the ultimate safe limits of the normal rated capacity.

The president, thinking in terms of increased sales volume, said:

"Hell, I'm a packer. The only way I know to make money is to manufacture a lot of sausage, smoke hams and bacon, render lard and produce other products. If I put considerable money into a new power plant, I won't have any left to buy equipment to take care of our expanding volume. If I spend money in the boiler and engine rooms, where am I going to find the cash to add more smokehouses, increase the size of the sausage department and add to the capacity of the hog chill rooms?"

Fallacies in Packer Thinking

This packer's statement, while emphatic, did not answer satisfactorily the important question of whether or not it is advisable to attempt to increase profits by cutting power costs.

It is true that a packer must have a processing plant and manufacturing equipment to produce meat products. It is also true that he must have steam and power in adequate amounts. He can produce power in his own plant at a low cost or he can purchase steam, water and electricity at prices which net a profit for the other fellow.

Money is made in the meat packing industry by selling a large volume of product at a very small net profit per pound. A dollar lost due to lack of sales volume is not the most important consideration, however. The net loss is only a few cents, as the profit per pound of product sold averages only $\frac{1}{4}$ c to $\frac{1}{2}$ c. When the packer loses a dollar in his power plant, however, the loss is more serious than is generally suspected. This loss is 100c, or 100 per cent, and the dollar is gone forever. There is no way to recover it.

Some packers hold tenaciously to the theory that because livestock is purchased for cash it is essential to have a large working balance on hand for quick deals. It is more important, they think, to be in a position to take advantage of daily market prices and situations than to invest money in the power plant to produce low cost electricity.

These men overlook a very important



George B. Mulloy, author of this article, is a member of the firm of Brady, McGillivray & Mulloy, consulting engineers, Chicago, Ill., and was for many years the chief combustion engineer for one of the large packers. He has had 30 years' experience in the design and operation of power plants.

This is the first of a series of articles on the economics of the packinghouse power plant by Mr. Mulloy. Others will appear in future issues of THE NATIONAL PROVISIONER. Packers who would like to reduce their steam and power costs will be interested in these articles.

fact when power plant improvements are being considered. Motive power cost may be only 5 per cent of the total cost of processing and selling product, but because the average net profit per dollar of sales is quite small, any appreciable reduction in power plant operating costs may make a difference of as much as 20 to 30 per cent in the net gain.

The packer can easily determine this fact for himself by substituting his cost figures in the following table and assuming that his power plant costs can be reduced 20 per cent. As a matter of fact there are few packinghouses in which power plant modernization would not reduce costs at least one-fifth. The packer who proceeds on the principle that this saving is possible will probably arrive at a result that may surprise him.

However, as the purpose is to prove a point rather than to arrive at accurate cost savings, there is no harm in using the 20 per cent saving figure.

The Meat Sales Dollar

The following costs in cents per pound of product sold may or may not apply in all cases. They are approximately correct, however, and will serve to illustrate how a small saving in the power plant vitally influences the percentage of net profit.

THE MEAT SALES DOLLAR

Item	Cents
Livestock	71.50
Labor	10.00
Supplies	3.50
Distribution	6.00
Miscellaneous	2.00
Profit	2.00
Steam and power	5.00
	100.00

If one-fifth of the steam and power cost can be saved through power plant modernization, the total cost per dollar of sales will be reduced 1c. This saving added to profit will increase this latter figure from 2c to 3c. This is an increase of $\frac{3}{2}$ or a gain of 50 per cent.

There is another way of evaluating savings made by cutting costs in the power plant. As stated previously, average net profit is seldom more than $\frac{1}{4}$ c to $\frac{1}{2}$ c per pound of product. The packer must sell at least four pounds of product, therefore, to make 1c.

Should the packer reduce his operating cost 1c per dollar of sales, he can make as much profit on the sale of 4 lbs. of product as he formerly made on the sale of 8 lbs. If his total power plant saving is \$5,000 per year, this is equivalent to increasing his total volume by 2,000,000 lbs. annually. In the case of small plants this would be an increase of approximately 10 per cent in volume. It would appear, therefore, that a saving of 20 per cent in power costs is of sufficient importance to receive more than casual consideration.

How Costs Can Be Cut

Following are some of the methods available for reducing power plant costs:

- 1.—Increasing overall operating efficiency in boiler and engine rooms.
- 2.—Replacing some or all of the present out-of-date steam and power generating equipment with units of more modern design and higher efficiency.
- 3.—Reducing the amount of power purchased by more careful selection of sizes, types and styles of motors operating equipment, and arranging operations so that the plant is not being

(Continued on page 29.)

PRAGUE POWDER

Registered U. S. Patent Nos. 2054623, 2054624, 2054625, 2054626



The Originators of

"SAFE, FAST CURE"

READY TO EAT HAMs

TENDER CORNED BEEF

Our Salesmen Are on the Job

We teach up-to-date practical methods of curing hams, bacon, loaves and sausage meats. The art is old, but the methods are new. *Learn to listen. Ask questions.*

Saltpetre and potassium salts were once the basis of all cures. Times have changed—raw materials are now converted and made into new quick-acting ("Prague Powder") curing materials. Time marches on!

The art of curing hams is old—the old methods are well known. Many years ago packers placed the well chilled ham in a heavy salt and saltpetre solution and waited 60 days for the soaking process to cure the ham.

A few years later the process was shortened by stitch-pumping with a spray needle. Ten years ago Griffith introduced the artery pumping method of placing the cure directly in the arteries of the ham. The result was the "Safe Fast Cure" and the "Short Time Cure."

Artery pumping is now a universal practice by all up-to-date packers

To cure a ham the short time way it is necessary for the ham to absorb 10% pickle solids. Artery pumping adds no more moisture than the old methods and saves 90% of the time and cellar space. In all cases the added pickle is all lost in the smokehouse process.

PRAGUE POWDER is made from a strong ham pickle, boiled, aged, settled, and forced (as wet pickle) through a rapid drying process on fusion rolls. A drop of this cured pickle comes off the fusion rolls as a splash of dry powder—PRAGUE POWDER.

When you cure hams with PRAGUE POWDER you will notice the difference. PRAGUE POWDER makes a *mild, mel-low* curing agent that is not only prac-

tical but easy to use, as hundreds will testify. Read our Prague Powder booklet for directions, and sell the larger ham boiling trade.

PRAGUE POWDER, as you see, is a pre-prepared substance and creates in the hams a delicate, sweet, tasty flavor. The original curing ingredients have been reduced and changed into a soft, powdery mass and called a "dry pickle" or powder.

The ham is made tender by artery pumping and the use of pre-prepared PRAGUE POWDER Pickle. All artery pumped hams can be finished in dry cure like "Sugar Cured Bacon" giving a "Rich, Ripe Flavor" and a ham more desirable from the consumer's standpoint. The public likes this high color, "ripe flavor" juicy ham.

When you use PRAGUE POWDER, either in the "Sweet Pickle Cure" or the "Dry Ham Cure" (as shown on Page 15 of the PRAGUE POWDER booklet) you are satisfying public taste. Ask for our "Dry Ham Cure" formula. It can be done. You will like it.



THE GRIFFITH LABORATORIES

1415-31 West 37th Street, Chicago, Illinois

Eastern Factory and Office: 35 Eighth St., Passaic, N. J.

Canadian Factory and Offices: 1 Industrial St., Leaside, Toronto, 12, Ontario

PROCESSING *Methods*

Bureau Has New Low Temperature Pork Treatment

Under new regulations of the U. S. Bureau of Animal Industry, packers operating under federal inspection will be allowed to use lower (below zero) holding temperatures and shorter storage periods in the refrigerating method of treating pork and pork products which may be eaten without further cooking.

B. A. I. Administrative Notice 3, published in the Federal Register, is a recapitulation of all approved methods of treating pork, and will be effective on and after April 1. It supersedes all instructions heretofore issued regarding the treatment of pork to destroy possible live trichinae.

The new regulation does not call for any change in the present heat method of treatment or in the curing methods of treatment as now applied to different kinds of sausage, capocollo, hams, coppa and boneless pork loins. Two alternative temperatures and freezing periods can be used, however, in treating pork by refrigeration, in addition to the present 5-deg., 20-30 day method.

New Refrigerating Method

The refrigerating treatment, as prescribed by the B. A. I., is carried out as follows:

"At any stage of preparation and after preparatory chilling to a temperature of not above 40 degs. F. or preparatory freezing, all parts of the muscle tissue of pork or product containing such tissue shall be subjected continuously to a temperature not higher than one of those specified in Table I, the duration of such refrigeration at the specified temperature being dependent on the thickness of the meat or inside dimensions of the container."

TABLE I.—Required Period of Freezing at Temperature Indicated

Temperature	Group 1	Group 2
" F.	Days	Days
5	20	30
-10	10	20
-20	6	12

"Group 1 comprises meat or product in separate pieces not exceeding 6 in. in thickness, or arranged on separate racks with the layers not exceeding 6 in. in depth, or stored in crates or open boxes not exceeding 6 in. in depth, or stored as solidly frozen blocks not exceeding 6 in. in thickness.

"Group 2 comprises meat or product in pieces, layers, or within containers, the thickness of which exceeds 6 in. but not 27 in. Such containers include tierces, barrels, kegs, and cartons having an inside diameter not exceeding 27 in."

Handling and Storing

"The meat or product undergoing such refrigeration, or the containers thereof, shall be so spaced while in the freezer as to insure a free circulation of air between the pieces of meat, layers, blocks, boxes, barrels, and tierces in order that the temperature of the meat throughout will be promptly reduced to not higher than 5 degs. F., -10 degs. F., or -20 degs. F., as the case may be.

"During the period of refrigeration the meat or product or lot thereof shall be kept separate from other products and in the custody of the Bureau. Rooms or compartments equipped for being made secure with Bureau lock or seal shall be provided.

"The room or compartment containing meat or product undergoing freezing shall be equipped with accurate thermometers placed at or above the highest level at which the product undergoing treatment is stored and away from refrigerating coils. After the prescribed freezing has been finished, the meat or product shall be kept under close supervision of an inspector until it is prepared in final form or until it is transferred to another establishment for preparation in finished form. . . ."

Pigs' Feet Souse

Pigs' feet souse is a popular food. Do you make it?

If you do, have you found its sale as good as it should be under a good formula?

A successful formula and detailed instructions for selecting, cooking and pickling pigs' feet to make a high-grade souse may be obtained by filling out and sending in the following coupon:

The National Provisioner,
407 So. Dearborn St., Chicago, Ill.

Please send me reprint on "Pigs' Feet Souse." I am a subscriber to The National Provisioner.

Name

Street

City

(Enclosed find 15c in stamps.)

POLISH FRESH HAM

How is Polish style fresh roast ham prepared? A Midwestern processor, who makes a number of specialty products, writes:

Editor THE NATIONAL PROVISIONER:

How should we prepare fresh roast ham for the Polish trade? What seasoning is used and how is the product finished?

Fresh roast ham for Polish consumers is prepared as follows:

Remove bone, skin and surplus fat from a 12/14 fresh ham, leaving about ½ to ¾ in. of fat on the cut. Make up a mixture of salt, ground pepper and a small amount of garlic. Rub some of mixture on inside of ham in the bone cavity.

Place the ham in a retainer and cook for 4 to 5 hours at 165 degs. F. Remove from cook vat and hold in cooler overnight, still in the retainer. Remove from retainer next morning and rub outside of ham thoroughly with above seasoning mixture.

Put ham in bake oven and bake from 1½ to 2 hours at 250 to 300 degs. After cooking and cooling, ham should be held in a storage temperature of 45 to 50 degs. until sold. This product should be moved promptly.

SWEET PICKLE CURE

A Midwestern sausage manufacturer asks some questions on sweet pickle curing. He writes:

Editor THE NATIONAL PROVISIONER:

When pickle is tested with a salometer, about how many degrees of the total registered are due to the presence of the nitrate and sugar? How much pickle should be used for each 100 lbs. of meat?

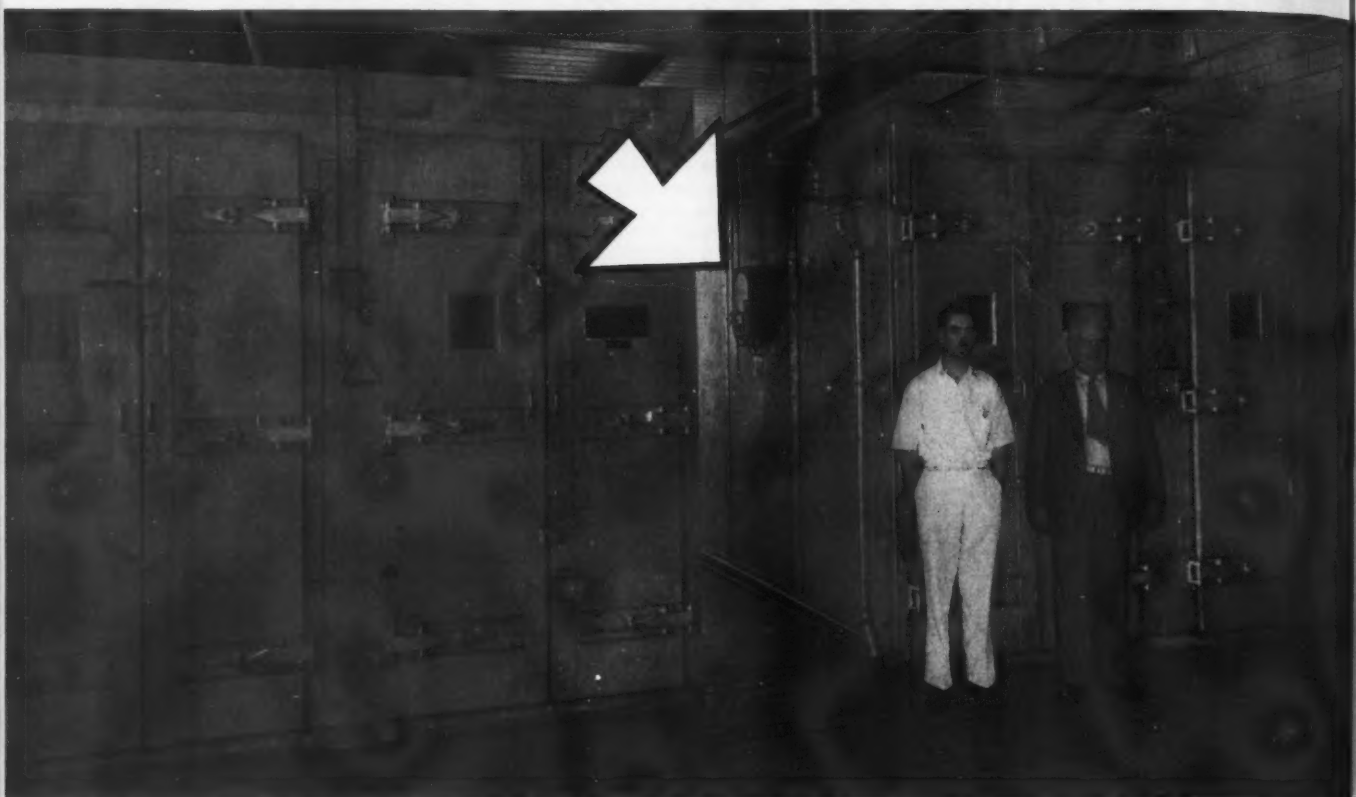
The nitrate and sugar in sweet pickle account for about 3 degs. of the total registered on the salometer. Thus, with pickle of 60 degs., the brine strength would be about 57 degs.

Roughly, 5 gallons of sweet pickle is necessary for each 100 lbs. of meat. More exactly, 5½ gallons should be used for each 100 lbs. of hams and shoulders and 6 to 6½ gallons for 100 lbs. of bellies.

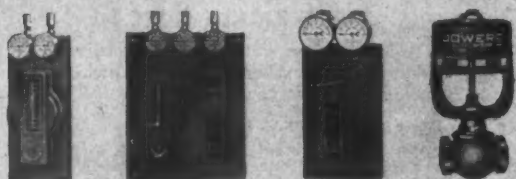
CABINETS FOR INSTRUMENTS

A Wisconsin packer protects recording thermometers from accidental damage and deterioration from moisture and steam by installing them in sheet metal cabinets. These cabinets are placed on walls or columns adjacent to the equipment to which the thermometers are attached. They have solid fronts and are painted to increase their useful life.

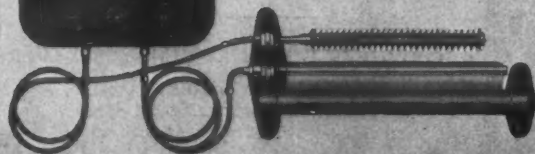
Another Progressive Packer Modernizes Smoking Operation



A few of the many different types of Powers Control



No. 26 Two-Pen Recorder Regulator with Aerofin type dry bulb and plain nickel plated wet bulb, wick and overflow water pan.



The C. J. Bowers Company
of MARSHALLVILLE, OHIO

Uses POWERS Automatic CONTROL
to regulate their new Carrier
Smoke Houses

To help prevent excessive losses through SHRINK and to maintain the delicious flavor and uniform high quality of their products the C. J. Bowers Co. use Powers control on their smoke houses to regulate temperature—humidity—air density and air circulation automatically.

Whether you install new type air conditioned smoke houses, or modernize and air condition your present brick houses, it will pay you well to call in a Powers engineer. Supplying automatic controls for all types of smoke houses and every process in the packing industry for many years has given us a wealth of experience which may be helpful to you in getting the right type of control for your requirements.

THE POWERS REGULATOR CO.
2725 Greenview Ave., Chicago — 231 East 46th Street, New York.
Offices in 47 Cities — See your phone directory.

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YEARS OF

POWERS

AUTOMATIC TEMPERATURE AND HUMIDITY CONTROL

Up and down the MEAT TRAIL

W. G. Reynolds, Packing Co. Head, Dies Suddenly at 73

W. G. Reynolds, president of the Reynolds Packing Co., Union City, Tenn., died suddenly on March 20 of a heart attack. Mr. Reynolds had attended church services and had then gone to a friend's office on business when he suddenly suffered the attack which caused his death.

Mr. Reynolds was born in Collierville, Tenn., 73 years ago, and in 1874 his family moved to a farm near Union City. In 1889, at the age of 23, he opened a grocery and meat market after becoming interested in this business through three days' service in a friend's grocery store. He continued the venture until 1918, when he branched out into the meat packing business.

Under Mr. Reynolds' guidance, the new Reynolds Packing Co. flourished to such an extent that its sales now average over \$1,000,000 annually. During 1939 the company's total sales amounted to 7,766,772 lbs., the largest in its history. The profit on this tonnage amounted to approximately one-fifth of a cent per lb. The company has enjoyed a record of consistent dividend payments.

Death of William J. Stange A Loss to Packing Industry

William J. Stange, president, Wm. J. Stange Co., who died on March 21 at Hollywood Hospital, Los Angeles, was buried at Mount Olive Cemetery, Chicago, on March 26.



WM. J. STANGE

Born in Chicago on October 14, 1870, Mr. Stange was educated in Chicago public schools and was a graduate in pharmacy of Notre Dame University, entering his father's drug and chemical business after graduation. Following the latter's death, Mr. Stange was associated with different partners in various phases of the chemical business until 1902, when he founded the present Wm. J. Stange Co.

He was one of the pioneer manufacturers of certified food colors, and his company is widely known today for its colors, curing materials, specialty products and special seasonings. At all times first a salesman and second a manufacturer, Mr. Stange's greatest pleasure was calling on business friends in all

parts of the country. His fatal illness was contracted while on a combination business and pleasure trip.

Mr. Stange was a member of numerous clubs and organizations, including the Notre Dame Alumni Association, York Chapter of Royal Arch Masons and many trade associations. He is survived by his widow, Elizabeth C. Stange.

R. G. Cowan to Describe Market Research Methods

A discussion on "Proven Methods of Market Research" by Donald R. G. Cowan, chief statistician in the commercial research department of Swift & Company, will be a feature of the annual marketing conference of the American Marketing Association, to be held April 24 and 25 at the Hotel Roosevelt, New York City.

In addition to the presentation by Mr. Cowan, who is president of the American Marketing Association, the conference will consider various other problems in dealing with sales personnel, methods of market research, and the use of sales presentations.

"The subjects," according to program announcement, "will be developed in a way to interest sales and marketing executives from every type of business, and special attention has been given to maintaining a proper balance between consumer and industrial marketing."

James Hamilton Is Named Vice President of Wilson

James A. Hamilton, general branch house and car route manager of Wilson & Co., was elected vice president of the company at a meeting of the board of directors on March 26. Mr. Hamilton joined the Wilson organization about 1910 at Pittsburgh, Pa., but has headquartered at Chicago throughout most of his long career with the company. The new Wilson vice president enjoys a wide acquaintance, both within and outside of the meat packing industry, having done a great deal of traveling in connection with his branch house duties.



JAS. HAMILTON

Board Designates H. C. Errion Head of Taylor Provision Co.

At a special meeting of the board of directors of the Taylor Provision Co., Trenton, N. J., held on March 25, Harry C. Errion was elected president and treasurer, to succeed William T. Taylor,



PICTORIAL MEAT CHART IN VISITORS' BUILDING

The above mural, measuring 6 ft. high by 10 ft. wide, was chosen by contest judges to grace a wall of the new visitors' building at the Sioux Falls, S. Dak., plant of John Morrell & Co. Here it is inspected by Leonard Payne (right), designer of the mural, and Palmer Eide, art instructor at Augustana college. Interior views of the new Morrell unit were shown in the March 9 issue of THE NATIONAL PROVISIONER.

who passed away on March 19. Mr. Errion has been with the firm for the past 16 years and as vice president had active charge of the business for the past eight years. Other elections included David Waugh, vice president and N. L. Petty, secretary.

Personalities and Events Of the Week

Geo. A. Woodward, vice president and general manager, Woodward-Bennett Corporation, Los Angeles, has been confined to his bed for the past week with a severe case of pneumonia. The doctors report, however, that he is past the danger point.

The Newmarket Co., Los Angeles, has recently spent \$20,000 in improvements to its plant, including the enlargement of coolers and a new loading dock.

Harold Cornelius, vice president and sales manager of the Cornelius Packing Co., Los Angeles, who recently underwent an appendectomy, is now able to be on the job at least a part of the time.

A fire caused by a spark from a blow torch did \$7,500 damage at the plant of Canada Packers, Limited, Toronto.

Irving Zeiler, Eastern representative, Wm. J. Stange Co., and Mrs. Zeiler spent a few days in Chicago the past week to attend the funeral of William J. Stange, who passed away on March 21.

V. A. Gibbs, manager, beef division, John Morrell & Co., Ottumwa, Ia., visited the company's branches in New York and New Jersey during the past week and also spent some time with the trade.

Alfred V. Zammataro, well known New York packinghouse broker, has been appointed Eastern representative of Krey Packing Co., St. Louis, to succeed J. H. Lawrence, who has retired. Mr. Zammataro makes his headquarters at 408 West 14th st., New York.

The Sterling Meat Corporation, Los Angeles, has recently installed a new ice making machine and boiler.

Quality Meat Packing Co., Los Angeles, is now leasing cooler space and having its killing done at the plant of the Gem Packing Co.

Fred Krey, founder of the Krey Packing Co., St. Louis, during his winter's stay in Los Angeles has been having some famous bouts at pinocle with Ludy Langer, president, Los Angeles Casings Co.

Harry J. Williams, vice president, Wilson & Co., Chicago, arrived in Los Angeles on March 26, with Mrs. Williams.

Mrs. Rose Bozzone, calf cost department, United Dressed Beef Co., died suddenly on Easter Sunday. Although only in her thirtieth year, Mrs. Bozzone had been with the company for 14 years and was highly regarded for her efficiency by J. J. Cook, office manager.

John W. Pennell, Eastern car-route manager, Krey Packing Co., St. Louis,

was a visitor in New York last week.

The Standard Casing Co., Inc. and its subsidiary, New York Butchers' Supply Co., are now located in their new and larger offices, showrooms and factory at 121 Spring st., New York.

A. W. Paulin, the popular president of Richter's Food Products, Inc., Chicago, has been spending the past few weeks at Hot Springs, Ark.

A. L. Disbrow, of Armour and Company's Chicago provision department, left last weekend for his annual three-week visit at St. Petersburg, Fla.

Geo. W. Martin, Chicago manager of John Morrell & Co., returned home this week after spending a pleasant week at West Palm Beach, Fla.

The G. M. Peet Packing Co., Chesaning, Mich., has awarded contracts for construction of a three-story addition to its plant. Plans provide for an L-

SPOKANE MAYOR AIDS PORK DRIVE

Among the state and civic officials who took an active part in the recent pork sausage link drive of the Institute of American Meat Packers was Mayor Frank Sutherland of Spokane, Wash. The mayor is shown here with K. J. Maxwell, general manager of the Carstens Packing Co., as he tried his hand at the sausage stuffer.



shaped brick, steel and concrete structure, 40 by 40 by 100 ft. in size, to cost approximately \$75,000.

Jake Lissner, Southwestern representative for the Globe Co., was up from St. Louis for several days, visiting the company's factory in Chicago.

B. B. Hanack, president, Processed Products Corp., Chicago, is hospitalized these days, recovering from injuries sustained in a recent auto accident.

O. E. Jones, vice president, Swift & Company, will be the guest speaker at the banquet to be held in conjunction with the sixth annual convention of the Vermont State Grocers' Association, which will take place May 22 to 25 at Burlington, Vt.

R. G. Akin, sales manager, Sylvania Industrial Corporation, has now fully recovered from his recent illness and is back on the job.

The name of George A. Eastwood, president, Armour and Company, has been put forward for nomination for re-election to the board of directors of the Chamber of Commerce of the United States.

Fred Early, of Early & Moor, Inc., well-known Boston casing specialists, recently returned from a vacation spent

in Florida, far away from the rigors of winter.

Henry W. Hardy, retired treasurer of Libby, McNeill & Libby, died on March 21 in Oakland, Calif. at the age of 72. Mr. Hardy joined Libby, McNeill & Libby in 1900, and while treasurer of that company was also treasurer or a director of various allied concerns prior to his retirement in 1933.

The Gallup Packing Co., Barberton, O., is enjoying an excellent pork business, according to George Gallup, president, and has recently put a new truck fleet into operation.

The tenth annual Packaging Conference and Exposition, sponsored by the American Management Association, was held March 26, 27 and 28 at the Hotel Astor, New York City. Full details of this show will appear in an early issue of THE NATIONAL PROVISIONER.

In the News 40 Years Ago

(From The National Provisioner, March 31, 1900.)

Very encouraging reports have been received in Chicago this week as to the health of P. D. Armour. The veteran packer is said to be enjoying better health than at any time during the past two or three years. He is getting all the rest he possibly can and is recuperating in the delightful climate of California. He does not see any visitors, though he is out a good deal walking and driving. In fact he walks one-half mile every morning to see his grandchildren. Mr. Armour expects to leave Pasadena for Chicago about April 26, and then plans to sail for Europe on May 10.


The British Admiralty will follow "Uncle Sam's" refrigeration idea. It is intended to install a system of cold storage in the great engines of war which the Navy Department will build in the future. These naval vessels will also be faultlessly equipped with every appliance which will illuminate and assist the handling of a modern man-of-war. This new departure into the field of refrigeration and electricity is one of the lessons which we taught the world in the Spanish-American war and

(Continued on page 36.)



That Good Liver Sausage

Here is a portrait of Liver Sausage. Isn't it a beauty? It will appear in a double-page color ad in *Life* Magazine out April 26. There's money for everybody in this promotion. Liver Sausage has been hiding its light under a bushel too long. We're going to let that light shine out—and sing out!

See next page for the details 

Liver Sausage Month

APRIL 22 TO MAY 30—HERE'S THE PROGRAM

A great industry unites behind one of its greatest products—Liver Sausage.

It's a great product for the consumer, because it's full of health and eating fun.

It's a great product for the meat business because it's full of new profit opportunities. One packer says, "It's the Rip Van Winkle of the meat business finally waking up."

No matter what part of the country it comes from, no matter where it's sold, the quality of liver sausage has never been so high as it is today.

Everybody knows the health benefits of liver. Liver sausage has those same valuable vitamins, minerals and protein—all ready to serve in its *neat, streamlined package*.

We are going to feature liver sausage (or Braunschweiger) for children and for grown-ups, in hot recipes as well as cold—for health as well as fun. We're going to put liver sausage in menus more often and in refrigerators more regularly.

This health and fun-to-eat story will be told in a color campaign in Life Magazine starting April 26—just in time for the peak selling season.

This is your chance to set new sales records for liver sausage.

INSTITUTE OF AMERICAN MEAT PACKERS

FOLLOW THIS TIME-TABLE



**APR.
1**

Rally Week Starts within the industry. Each meat packer and sausage maker holds meeting of production, sales and advertising heads to coordinate campaign within organization.

**APR.
8**

Salesmen Get the Story and samples of merchandising materials. Start calling on retail trade to arrange for tie-ins and features. This selling program continues until May 30.

**APR.
22**

Liver Sausage Month Begins for Retail Meat and Food Trade. First poster goes up. Displays are planned . . . include sampling demonstrations. Newspaper and

handbill features are planned. Every retail meat salesman is completely informed of the campaign.

**APR.
26**

First Life Ad Appears—two-page spread in four colors—19,900,000 people will see it. It is one of the most striking food ads ever run.



Let's all get behind

That Good Liver Sausage



**MAY
13**

Get Set for Second Ad—Second poster to go up in retail stores.

**MAY
17**

Second Life Ad Appears. A full-color page featuring liver sausage as a good health food for growing children. A strong ad and a sound one.

A page for the PACKER SALESMAN

Campaign Success Depends on Salesman

SEVENTY per cent of the retailers who knew about the pork sausage links advertising in advance of its appearance in *Life* magazine on February 23 and March 8 received this information from meat packers' and sausage manufacturers' salesmen.

Were your retail dealers among this group?

A large number of retailers advised their national trade associations or the Institute of increases in sales volume of pork sausage links ranging from 50 per cent to many times their normal volume.

Were your retail customers among this group?

The pork sausage links campaign, as a national cooperative venture, has been concluded. The industry now is embarking on a similar nation-wide promotion behind liver sausage. This promotion will be the biggest, most aggressive drive for increased liver sausage sales ever undertaken by the sausage industry. As in the case of the pork sausage links campaign, the advertising and promotion campaign will be conducted on all fronts.

How Program Will Function

Life magazine will carry convincing sales-compelling messages to consumers. The retailers' own magazines will convey the story of the campaign and merchandising suggestions to your dealers, and the dealers' own trade associations will be behind the promotion aggressively.

Retail dealers will be equipped with colorful point-of-sale display material that will flash the tastiness and health advantages of liver sausage to shopping consumers; prompt them to buy liver sausage. The support of allied industries, including restaurants, hotels, railroad dining cars and allied food industries, will be utilized throughout the campaign.

All of this, however, should serve merely as the spring-board from which salesmen will launch their individual drives for increased sales volume in liver sausage. Surveys of retail stores and of sales results during the pork sausage links campaign disclosed more forcefully than ever before that the extent of success for individual salesmen, individual sausage manufacturers and, accumulatively, for the country at large, is determined by the effectiveness of the "front line work" carried on by salesmen.

The fact that one-fifth of all member companies reporting to the Institute

showed increases in pork sausage links sales of 30 per cent or more during the recent campaign is definite evidence of effective sales organization within such establishments. This means that the salesmen went forth to talk with their dealers thoroughly convinced of the sales opportunities awaiting them

plain the whole campaign in detail.

What you, as a salesman, should do:

1.—As soon as you receive your campaign material, study every angle of the campaign; then, when you know it, put it to work for your dealers.

2.—Read the April 26 and May 17



and fully equipped to sell their retailers on aggressively tying-in with the campaign. The big question in this liver sausage campaign lies in whether you in your territory, and your company in its area, will capitalize on the program. What will your sales records show when the liver sausage campaign is closed?

Suggestions to Salesmen

Within a few days, every member company of the Institute will distribute campaign material to its salesmen. This material will include a folder reproducing the consumer advertising in full color and containing suggestions for promoting the campaign with dealers. Each salesman will also receive a copy of a four-page retailer bulletin which will give detailed information on the program and will contain many suggestions for retailers. Your dealers likewise will receive copies of this retailer bulletin. In addition, talking films have been made available to member companies of the Institute which will vigorously ex-

advertisements prepared for *Life* magazine carefully.

3.—Study the folder which contains these advertisements from cover to cover and carry it on your calls as a sales manual.

4.—Show your dealers the copy of the poster and the retailer bulletin, which also will be provided to you. Tell them that they will receive copies of this material at the start of the campaign. Show them how to display the posters.

5.—Advise your retailers that they may obtain mats for use in newspaper and handbill advertising by addressing a penny post card to the Institute and requesting copies of the mats. Show them reproductions of the mats in your folder.

6.—Show them the price card, which also is to be provided to them, and urge them to set up special displays of liver sausage, including a sampling display.

7.—Show retailers the advertising

(Continued on page 36.)



● Operating the new Jamison "Model W Wedgetight" Fastener is child's play. Re-design and refinements make possible effortless action—yet it seals with the force of a sledge-driven wedge. Streamlined in keeping with the new "Adjustoflex" Hinge.

"Model W Wedgetight" Fastener with adjustable keeper and "Adjustoflex" Hinges are standard equipment on new JAMISON COLD STORAGE DOORS.

For details get Bulletin 122. Write to the Jamison Cold Storage Door Co., Hagerstown, Md. Branches in principal cities.

Jamison, Stevenson, and Victor Doors



**SERVES
BETTER...
LONGER**

because it's
BLOCK BAKED

**UNITED'S
B.B.
BLOCK BAKED
CORKBOARD**

ALTHOUGH natural cork is recognized as one of the most efficient types of insulation, it must be thoroughly baked throughout the entire mass to obtain the utmost efficiency from its natural insulating qualities. Block Baking is an exclusive process of combined internal and external heating. The center sheet of the block possesses exactly the same insulating values as does the surface of the block. Without green centers or charred surfaces, UNITED'S B. B. Corkboard provides greater resistance to moisture absorption and therefore provides higher insulation efficiency. That's why it serves better...longer.

**UNITED
CORK COMPANIES**
KEARNY, NEW JERSEY
Manufacturers and Erectors of Cork Insulation

SALES OFFICES AND WAREHOUSES

Albany, N. Y.	Cincinnati, Ohio	Milwaukee, Wis.	Pittsburgh, Pa.
Baltimore, Md.	Cleveland, Ohio	New Orleans, La.	Rock Island, Ill.
Boston, Mass.	Hartford, Conn.	New York, N. Y.	St. Louis, Mo.
Buffalo, N. Y.	Indianapolis, Ind.	Philadelphia, Pa.	Waterville, Me.
Chicago, Ill.	Los Angeles, Calif.		

REFRIGERATION *and Air Conditioning*

MEAT PLANT REFRIGERATION

**A Complete Course for
Executives and Workers
Prepared by—**

—The National Provisioner

Questions and Answers

THIS is the fourth group of questions and answers designed to aid students of THE NATIONAL PROVISIONER course in meat plant refrigeration and air conditioning in reviewing important points in recent lessons. The first, second, and third groups of queries appeared in the March 2, 9, and 23 issues, and contained questions one to ninety-two.

Begin with Ninety-three

93.—What is the disadvantage of too much clearance between the face of the piston and the head end of the cylinder in a double-acting compressor?

A.—Loss of compressor volume due to re-expansion.

94.—What would cause the piston to touch the head of the compressor cylinder?

A.—Insufficient clearance.

95.—How is such a condition corrected?

A.—By screwing the rod into the crosshead.

96.—Is suction pressure uniform throughout a large refrigerating system?

A.—No.

97.—Where is pressure the least?

A.—At the ammonia compressor.

98.—Is density of vapor entering a compressor greater or less than density of vapor leaving the evaporating coils? Assume temperature of liquid entering expansion valve to be 70 degs. F., suction pressure to be 13 lbs. gauge, compressor entering temperature to be 10 degs. F. and that the vapor is saturated when leaving the coils.

A.—Density of vapor leaving the coils is greater, being .100 lbs. per cu. ft., compared with a density of .098 lbs. per cu. ft. when it enters the compressor.

99.—What is the function of a flywheel on an ammonia compressor?

A.—The flywheel stores up energy

which is used to carry the machine over dead center.

100.—Is oil distributed to wearing parts of an ammonia compressor through brass or steel piping?

A.—Steel oil piping is used. Ammonia attacks copper and brass.

101.—Why are babbitt rings used in an ammonia compressor?

A.—There is less friction. The babbitt takes the wear.

102.—Where should temperature and pressure gauges be located on an ammonia compressor which is isolated from the engine room?

A.—On the condenser as well as in engine room.

103.—Are instruments with brass movements and cases satisfactory?

A.—No. As mentioned previously, copper and brass corrode in contact with ammonia. Any metals not affected by ammonia may be used for these parts.

104.—At what point are foul gases purged from an atmospheric condenser? From a vertical shell and tube condenser? From a multi-tube condenser?

A.—At top of stem from an atmospheric condenser; at a point about 3 ft. above the liquid from a vertical shell and tube condenser, and at top of shell from a multi-tube condenser.

Watch The Markets!

It's just as important to know the market when prices are high as when they are low. It is vital to know the market when prices are fluctuating up or down.

A car of product sold at $\frac{1}{4}$ c under the market costs the seller \$37.50; at $\frac{1}{2}$ c under he loses \$75.00; at $\frac{3}{4}$ c under he loses \$112.50; at 1c under he loses \$150.00.

The same is true of BUYERS of carlot product. If they pay over the going market they stand to lose similar amounts.

THE NATIONAL PROVISIONER'S DAILY MARKET SERVICE gives an exact reflection of the market and the market prices on each of the full trading days of the week.

For full information, write THE NATIONAL PROVISIONER, 407 S. Dearborn St., Chicago, Ill.

105.—How is efficiency of an ammonia compressor determined?

A.—By calculating theoretical work of compression and comparing the result with mechanical or electrical input to compressor.

106.—What is an indicator card?

A.—A chart of the simultaneous relation of pressure in cylinder of the ammonia compressor to position of the piston in its stroke. Indicator card is used to determine average cylinder pressure.

107.—Why should ammonia suction line to the compressor be insulated?

A.—To prevent excessive superheating of ammonia gas.

108.—What is an accumulator and why is it used in a suction line?

A.—Accumulator is a chamber large enough to reduce the gas velocity to less than 2,000 ft. per minute. It is used to trap liquid slugs and prevent them from reaching the cylinder where they might knock out the head.

109.—What happening is an indication to have ammonia cylinder rebored?

A.—When rings break frequently it is an indication that the cylinder is out of round. A wear of .001 in. per inch of cylinder diameter is permitted.

110.—What may happen when a slug of liquid reaches the ammonia cylinder?

A.—Cylinder head may be knocked out.

111.—Where do liquid slugs come from and how can they be prevented from forming or reaching the cylinder?

A.—Liquid slugs come from the suction line. They result from overfeeding of evaporator coils and can be prevented by proper expansion valve regulation and installation of an accumulator.

112.—Why does frost melt from suction line of a compressor?

A.—Too much gas superheat, or leaky valves.

113.—Can a compressor be operated without frost on suction line?

A.—Yes, providing suction gas temperature is above 32 degs. F.

114.—What is indicated when frost appears on discharge line?

A.—Frost on discharge line is an indication of liquid ammonia in the cylinder. Compressor should be stopped immediately and pumped out. Reason for liquid ammonia in the cylinder should be determined and the situation corrected.

115.—Where does frost on a suction line come from?

A.—Moisture in the air condenses on the line and freezes.

116.—If temperature of suction gas leaving evaporator is the same as that

entering compressor, how can there be any pressure differential?

A.—In this case the pressure does not correspond to the temperature because entering suction gas is superheated.

117.—Discharge pressure is 155 lbs. gauge, suction pressure is 22 lbs. gauge, and temperature of liquid at the expansion valve is 82 degs. F. Calculate volume of vapor circulated per minute to produce 100 tons of refrigeration.

A.—318.8 cu. ft. per minute.

118.—What percentage of liquid ammonia in a refrigerating system is available for refrigerating purposes?

A.—85.3 per cent.

119.—Calculate theoretical displacement in cubic feet per minute for a 200-ton plant under following conditions: Saturated suction, 18 lbs. gauge; discharge pressure, 180 lbs.; temperature of liquid, 90 degs. F.

A.—727.7 cu. ft. per minute.

120.—Is it possible to overcharge an ammonia system?

A.—Yes. If the liquid receiver fills and backs up into the condenser, available condensing surface is reduced to a point at which head pressure will increase dangerously.

121.—What is approximate volume of ammonia passing through an expansion valve each minute to produce one ton of refrigeration when the heat pressure is 165 lbs. and suction pressure 20 lbs.?

A.—19.88 cu. in. per minute.

122.—Fifty gallons of calcium brine

with a specific gravity of 1.2 is circulated per minute. Temperature split is 4 degs. F. and temperature of return brine is 16 degs. F. What is the tonnage in 24 hours?

A.—8.10 tons.

123.—How can it be determined whether an ammonia drum has been completely emptied?

A.—Weigh it before and after.

124.—How fast can ammonia be charged into a system and where is the best place to introduce it?

A.—Rate of charging depends on pressure developed in ammonia drum and pressure in evaporator. Best place is at the expansion valve.

125.—Why does lowering of suction pressure of a compressor bring about an increase in discharge temperature?

A.—Because the compression ratio is increased.

126.—A solution of calcium brine has a specific gravity of 1.172 and a solution of sodium chloride has a specific gravity of 1.158. What are the freezing points?

A.—Minus 2 degs. F. and 0 degs. F. respectively.

127.—What is the working pressure in the ammonia still?

A.—It is the same as discharge pressure from the still. Ammonia may be discharged to the condenser or ammonia suction line.

128.—Is brine circulation independent of ammonia gas circulation?

A.—Yes.

PACKER AND FOOD STOCKS

Price ranges of listed stocks for four day week previous to March 28, (Market closed Friday, March 22):

	—Week ended March 27—				Mar. 20
	Sales	High	Low	Close	Close
Amal. Leather...	200	2	1%	1%	2
Do. Pfd.	100	15%	15%	15%	16%
Amer. H. & L.	1,300	5	4%	4%	4%
Do. Pfd. ....	.....	.....	.....	.....	34%
Amer. Stores....	2,500	13%	13%	13%	13
Armour Ill.	7,100	5%	5%	5%	5%
Do. Pr. Pfd.	500	52%	51	52%	53
Do. Pfd. ....	.....	.....	.....	.....	64%
Do. Del. Pfd.	100	109%	100%	109%	108%
Beechnut Pack.	100	124	124	124	126
Bohach, H. C.	300	2%	2%	2%	2
Do. Pfd.	60	31	30	31	30
Chick. Co. Oil. ....	.....	.....	.....	.....	12
Childs Co.	2,300	8%	6	6%	6%
Cudahy Pack.	200	13%	13	13	13
Do. Pfd.	40	70%	70	70	70%
First Nat. Strs.	1,300	45	44%	44%	45%
Gen. Foods....	3,200	48	47%	47%	47%
Do. Pfd.	200	116%	116%	116%	116%
Glidden Co.	1,100	17%	17	17%	17
Do. Pfd.	500	44%	43%	44%	42%
Gobel Co.	14,400	3%	3%	3%	3%
Gr. A. & P.	650	106	98	104	106%
Do. 1st Pfd.	50	133	133	133	132
Hormel, G. A. ....	.....	.....	.....	.....	35
Hygrade Food. ....	.....	.....	.....	.....	2%
Kroger O. & B.	6,000	32%	31%	32	31%
Libby McNeill.	1,700	6%	6%	7	6%
Mickelberry Co.	50	3%	3%	3%	3%
M. & H. Pfd.	240	6%	6%	6%	6%
Morrell & Co. ....	.....	.....	.....	.....	43%
Nat. Tea.	33,700	8%	6%	8%	6%
Proc. & Gamb.	1,700	60	68%	68%	68%
Do. Pr. Pfd.	40	115%	114%	115%	114%
Rath Pack. ....	.....	.....	.....	.....	86%
Safeway Strs.	5,300	51%	49%	51	51
Do. 5% Pfd.	90	111	110%	111	110%
Do. 6% Pfd.	460	111%	111%	111%	111%
Do. 7% Pfd.	700	111%	111%	111%	112%
Stahl Meyer. ....	.....	.....	.....	.....	1%
Swift & Co.	4,650	22%	20%	22%	22%
Do. Intl.	4,200	29%	28	28	29%
Trunz Pork. ....	.....	.....	.....	.....	8%
U. S. Leather.	100	5%	5%	5%	5%
Do. A.	700	9%	9%	9%	9%
Do. Pfd.	100	60	60	60	61%
United St. Yds.	500	2%	2	2	2%
Do. Pfd.	600	7	6%	6%	7%
Wesson Oil.	1,100	23	22	22	22%
Do. Pfd. ....	.....	.....	.....	.....	68
Wilson & Co.	2,800	5%	5%	5%	5%
Do. Pfd.	700	64	63	64	64

VIKING ROTATES IN BOTH DIRECTIONS

Pump Rotation Determines Suction and Discharge

... WITH EQUAL EFFICIENCY! - EQUAL ACCURACY!

You merely reverse rotation of pump shaft to reverse flow of liquid in the Viking Rotary Pump. Figure at left shows pump with TOP SUCTION and SIDE DISCHARGE... at right, after reversing, SIDE SUCTION and TOP DISCHARGE. Simple and practical isn't it? And this flexible, time-saving feature makes Viking the ideal pump for the handling of blood, brine, lard, water and all other liquid packing house products. Get the complete details of this "2 in 1" unit... write for Bulletin 103-35.

VIKING PUMP COMPANY
CEDAR FALLS IOWA

FOR CONSERVING LOW TEMPERATURES ECONOMICALLY

PALCO INSULATION WOOL

From durable Redwood bark

16-page manual on request

THE PACIFIC LUMBER COMPANY
100 Bush St., San Francisco
Chicago Los Angeles New York

CASINGS ORDER CLARIFIED

The recent order of the British government prohibiting, except under license, imports of all foodstuffs not already subject to license, has aroused some confusion with respect to the exact status of casings, the Institute of American Meat Packers reports.

Inquiries at Washington have brought out the fact that the language of the provision, which prohibited entry of casings "dispatched from place of origin after March 20 and arriving in the United Kingdom after March 27," was used "advisedly." "In other words," the Institute reports, "it appears that the British wanted to stop importations, except under license, after March 27, and chose the date March 20 'to take care of shipments which might be made within seven days.'"

It is also understood in Washington that the British government cautioned importers not to order goods which might arrive after March 27.

CANADIAN IMPORT PERMITS

Permits for importation of slightly more than 1,100,000 lbs. of fresh and frozen U. S. pork into Canada were issued up to the middle of March, according to an official dispatch from Ottawa, and additional permits for approximately 350,000 lbs. of product were to be issued soon. Permits for April will not be issued until after April 1, which will have the effect of preventing arrival of imports during the first week in April. No carry-over from one month to the next will be permitted.

In order to prevent excessive importations during any single week, the April permits will probably be issued in installments, it is reported. A similar procedure is indicated for subsequent months. Canadian authorities report that during March they have been dealing with requests for permits far in excess of the monthly quota of 1,626,769 lbs.

MEAT IMPORTS AT NEW YORK

Imports for the period March 14 to 20, inclusive, at New York:

Point of origin	Commodity	Amount, lbs.
Argentina—Canned corn beef.....		106,496
	Roast beef in tins.....	9,000
Hungary—Cooked hams in tins.....		123,766
	Cooked pork loins in tins.....	59,184
	Cooked picnics in tins.....	1,760
Canada—Fresh frozen ham.....		25,600
	Fresh chilled pork cuts.....	16,698
	Fresh pork cuts.....	5,874
	Smoked bacon.....	4,135
	Frozen cow livers.....	2,384
	Fresh pork bellies.....	1,189
	Frozen pork cuts.....	807
	Smoked sausage.....	435
	Pork sausage.....	25
Italy—Smoked sausage.....		32,084
	Cooked ham in tins.....	3,018
Denmark—Liverpaste in tins.....		596

CASING EXPORTS AND IMPORTS

Exports and imports of sausage casings during 1939 with comparisons:

	EXPORTS		
	1939 lbs.	1938 lbs.	1937 lbs.
Hog casings.....	8,654,135	7,980,550	6,091,839
Beef casings.....	6,590,671	11,218,940	16,374,522
Other casings.....	1,644,564	1,341,709	1,379,479
	IMPORTS		
	1939 lbs.	1938 lbs.	1937 lbs.
Sheep, lamb and goat.....	6,237,861	6,028,193	8,312,867
Other casings.....	10,217,672	5,756,706	11,374,458

HOG CUTTING LOSS CONTINUES THIS WEEK

Loss on the three weight averages continued this week, with loss on light butchers running 16c per cwt., on medium weights, 9c per cwt. and on heavy hogs, 11c per cwt. Decline in hog prices on the lighter weights was 5c and 6c per cwt., while heavy weights remained the same. Product values, however, declined 22c per cwt. on light butchers, 16c on medium butchers and 12c on heavy averages. Hog prices and product values from THE NATIONAL PROVISIONER DAILY MARKET SERVICE; cutting percentages from actual tests in Chicago plants.

	180-220 lbs.			220-240 lbs.			270-300 lbs.		
	Pct. live wt.	Price per lb. alive	Value per cwt. alive	Pct. live wt.	Price per lb. alive	Value per cwt. alive	Pct. live wt.	Price per lb. alive	Value per cwt. alive
Regular hams.....	14.00	11.2	\$ 1.57	13.70	11.2	\$ 1.53	13.50	11.2	\$ 1.51
Picnics.....	5.60	7.6	.43	5.40	7.5	.41	5.10	7.3	.37
Boston butts.....	4.00	8.8	.35	4.00	8.6	.34	4.00	7.9	.32
Loins (blade in).....	9.80	10.0	.98	9.60	9.9	.95	9.10	9.5	.86
Bellies, S. P.....	11.00	8.1	.89	9.70	7.6	.74	3.10	6.1	.19
Bellies, D. S.....	..	..	..	2.00	4.3	.09	9.00	4.2	.42
Fat backs.....	1.00	3.4	.03	3.00	3.7	.11	4.50	4.3	.19
Plates and jowls.....	2.50	3.0	.08	3.00	3.0	.09	3.30	3.0	.10
Raw leaf.....	2.10	4.4	.09	2.20	4.4	.10	2.10	4.4	.09
P. S. lard, rend. wt.....	12.40	4.7	.58	11.00	4.7	.52	10.20	4.7	.48
Spareribs.....	1.60	5.8	.00	1.60	5.7	.00	1.50	5.6	.08
Trimming.....	3.00	5.0	.15	2.80	5.0	.14	2.70	5.0	.14
Feet, tails, neckbones.....	2.00	..	.04	2.00	..	.04	2.00	..	.04
Offal and miscellaneous.....	..	..	.21	..	..	.21	..	..	.21
TOTAL YIELD AND VALUE	69.00		\$ 5.49	70.00		\$ 5.36	71.00		\$ 5.00
Cost of hogs per cwt.....		\$ 5.26			\$ 5.27			\$ 4.99	
Condemnation loss.....		.03			.03			.03	
Handling and overhead.....		.58			.50			.41	
TOTAL COST PER CWT. ALIVE		\$ 5.87			\$ 5.80			\$ 5.43	
TOTAL VALUE		5.49			5.36			5.00	
Loss per cwt.....		\$.38			\$.44			\$.43	
Loss per hog.....		.76			1.01			1.23	

Consumer Demand for Beef Remains Good, Says Lewis

CONSUMER demand for beef is holding up unexpectedly well in its competition with an increasing pork supply that will probably bring about a new record for total domestic pork consumption this year and will also approach the present record for pork consumption per capita, which has stood since 1908, said George M. Lewis, director of the Department of Marketing of the Institute of American Meat Packers, in an address before the Buena Vista County Cattle Feeders Association at Storm Lake, Ia., on March 28.

"A plentiful supply of high-grade beef is in prospect for the remainder of this year, and particularly for the next few months," said Mr. Lewis. "Abundant feed supplies, and comparatively high cattle prices during the past two years, as compared to feed prices, have encouraged the feed-lot production of cattle, particularly in the Corn Belt states, where such feeding is most important. Beef cattle numbers are now on the upgrade, however, after a four-year decline which ended in 1938; and when herds are being built up, marketings usually show a slight decline. Hence the probable increases of about 10 per cent in the country's total meat supply this year, despite the fact that last year also set a new record for total meat consumption, will consist mainly of a 20 to 25 per cent gain in pork production."

WAR EFFECT ON EXPORTS

Exports of pork and lard are not up to the volume that would normally flow in a year of large production and low prices. The European war has diminished rather than increased export demand for many farm products.

Exports and imports of packinghouse products during the first five months of the war compared with the like period a year earlier, however, show a slight increase in most instances:

	Sept.-Jan. 1939-40 lbs.	Sept.-Jan. 1938-39 lbs.
Exports—		
Cured Pork ¹	31,033,000	25,374,000
Other Pork ²	38,611,000	16,161,000
Lard.....	116,396,000	108,589,000
Imports—		
Cattle, No.....	243,000	265,000
Beef, canned, including corned.....	37,722,000	30,897,000
Hides and skins.....	139,861,000	118,373,000

¹Includes bacon, hams, shoulders and sides.

²Includes fresh, frozen, pickled, salted and canned.

LARD AND GREASE EXPORTS

Exports of lard from New York City, week of March 23, 1940, totaled 810,135 lbs.; greases 618,400 lbs.

CHICAGO PROVISION MARKETS

Provisions and Lard

CASH PRICES

Based on actual carlot trading Thursday,
March 28, 1940

REGULAR HAMS	
Green	
8-10	12 1/2
10-12	12 1/2
12-14	11 1/2
14-16	11 1/2
16-18	11 1/2
18-20	11 1/2
20-22	11 1/2
22-24	11 1/2
24-26	11 1/2
26-28	11 1/2
28-30	11 1/2
30-32	11 1/2
32-34	11 1/2
34-36	11 1/2
36-38	11 1/2
38-40	11 1/2
40-42	11 1/2
42-44	11 1/2
44-46	11 1/2
46-48	11 1/2
48-50	11 1/2
50-52	11 1/2
52-54	11 1/2
54-56	11 1/2
56-58	11 1/2
58-60	11 1/2
60-62	11 1/2
62-64	11 1/2
64-66	11 1/2
66-68	11 1/2
68-70	11 1/2
70-72	11 1/2
72-74	11 1/2
74-76	11 1/2
76-78	11 1/2
78-80	11 1/2
80-82	11 1/2
82-84	11 1/2
84-86	11 1/2
86-88	11 1/2
88-90	11 1/2
90-92	11 1/2
92-94	11 1/2
94-96	11 1/2
96-98	11 1/2
98-100	11 1/2

BOILING HAMS	
Green	
16-18	11 1/2
18-20	11 1/2
20-22	11 1/2
22-24	11 1/2
24-26	11 1/2
26-28	11 1/2
28-30	11 1/2
30-32	11 1/2
32-34	11 1/2
34-36	11 1/2
36-38	11 1/2
38-40	11 1/2
40-42	11 1/2
42-44	11 1/2
44-46	11 1/2
46-48	11 1/2
48-50	11 1/2
50-52	11 1/2
52-54	11 1/2
54-56	11 1/2
56-58	11 1/2
58-60	11 1/2
60-62	11 1/2
62-64	11 1/2
64-66	11 1/2
66-68	11 1/2
68-70	11 1/2
70-72	11 1/2
72-74	11 1/2
74-76	11 1/2
76-78	11 1/2
78-80	11 1/2
80-82	11 1/2
82-84	11 1/2
84-86	11 1/2
86-88	11 1/2
88-90	11 1/2
90-92	11 1/2
92-94	11 1/2
94-96	11 1/2
96-98	11 1/2
98-100	11 1/2

SKINNED HAMS	
Green	
10-12	13 1/2
12-14	12 1/2
14-16	12 1/2
16-18	12 1/2
18-20	12 1/2
20-22	12 1/2
22-24	12 1/2
24-26	12 1/2
26-28	12 1/2
28-30	12 1/2
30-32	12 1/2
32-34	12 1/2
34-36	12 1/2
36-38	12 1/2
38-40	12 1/2
40-42	12 1/2
42-44	12 1/2
44-46	12 1/2
46-48	12 1/2
48-50	12 1/2
50-52	12 1/2
52-54	12 1/2
54-56	12 1/2
56-58	12 1/2
58-60	12 1/2
60-62	12 1/2
62-64	12 1/2
64-66	12 1/2
66-68	12 1/2
68-70	12 1/2
70-72	12 1/2
72-74	12 1/2
74-76	12 1/2
76-78	12 1/2
78-80	12 1/2
80-82	12 1/2
82-84	12 1/2
84-86	12 1/2
86-88	12 1/2
88-90	12 1/2
90-92	12 1/2
92-94	12 1/2
94-96	12 1/2
96-98	12 1/2
98-100	12 1/2

PICNICS	
Green	
4-6	8 1/2
6-8	7 1/2
8-10	7 1/2
10-12	7 1/2
12-14	7 1/2
14-16	7 1/2
16-18	7 1/2
18-20	7 1/2
20-22	7 1/2
22-24	7 1/2
24-26	7 1/2
26-28	7 1/2
28-30	7 1/2
30-32	7 1/2
32-34	7 1/2
34-36	7 1/2
36-38	7 1/2
38-40	7 1/2
40-42	7 1/2
42-44	7 1/2
44-46	7 1/2
46-48	7 1/2
48-50	7 1/2
50-52	7 1/2
52-54	7 1/2
54-56	7 1/2
56-58	7 1/2
58-60	7 1/2
60-62	7 1/2
62-64	7 1/2
64-66	7 1/2
66-68	7 1/2
68-70	7 1/2
70-72	7 1/2
72-74	7 1/2
74-76	7 1/2
76-78	7 1/2
78-80	7 1/2
80-82	7 1/2
82-84	7 1/2
84-86	7 1/2
86-88	7 1/2
88-90	7 1/2
90-92	7 1/2
92-94	7 1/2
94-96	7 1/2
96-98	7 1/2
98-100	7 1/2

BELLIES	
(Square cut seedless)	
Green	
6-8	9 1/2
8-10	8 1/2
10-12	8 1/2
12-14	8 1/2
14-16	8 1/2
16-18	8 1/2
18-20	8 1/2
20-22	8 1/2
22-24	8 1/2
24-26	8 1/2
26-28	8 1/2
28-30	8 1/2
30-32	8 1/2
32-34	8 1/2
34-36	8 1/2
36-38	8 1/2
38-40	8 1/2
40-42	8 1/2
42-44	8 1/2
44-46	8 1/2
46-48	8 1/2
48-50	8 1/2
50-52	8 1/2
52-54	8 1/2
54-56	8 1/2
56-58	8 1/2
58-60	8 1/2
60-62	8 1/2
62-64	8 1/2
64-66	8 1/2
66-68	8 1/2
68-70	8 1/2
70-72	8 1/2
72-74	8 1/2
74-76	8 1/2
76-78	8 1/2
78-80	8 1/2
80-82	8 1/2
82-84	8 1/2
84-86	8 1/2
86-88	8 1/2
88-90	8 1/2
90-92	8 1/2
92-94	8 1/2
94-96	8 1/2
96-98	8 1/2
98-100	8 1/2

GREEN AMERICAN BELLIES	
18-20	5 1/2 @ 5 1/2
20-22	5 1/2 @ 5 1/2

D. S. BELLIES	
Clear	
16-18	5 1/2
18-20	5 1/2
20-22	5 1/2
22-24	5 1/2
24-26	5 1/2
26-28	5 1/2
28-30	5 1/2
30-32	5 1/2
32-34	5 1/2
34-36	5 1/2
36-38	5 1/2
38-40	5 1/2
40-42	5 1/2
42-44	5 1/2
44-46	5 1/2
46-48	5 1/2
48-50	5 1/2
50-52	5 1/2
52-54	5 1/2
54-56	5 1/2
56-58	5 1/2
58-60	5 1/2
60-62	5 1/2
62-64	5 1/2
64-66	5 1/2
66-68	5 1/2
68-70	5 1/2
70-72	5 1/2
72-74	5 1/2
74-76	5 1/2
76-78	5 1/2
78-80	5 1/2
80-82	5 1/2
82-84	5 1/2
84-86	5 1/2
86-88	5 1/2
88-90	5 1/2
90-92	5 1/2
92-94	5 1/2
94-96	5 1/2
96-98	5 1/2
98-100	5 1/2

D. S. FAT BACKS	
6-8	4 1/2
8-10	4 1/2
10-12	4 1/2
12-14	4 1/2
14-16	4 1/2
16-18	4 1/2
18-20	4 1/2
20-22	4 1/2
22-24	4 1/2
24-26	4 1/2
26-28	4 1/2
28-30	4 1/2
30-32	4 1/2
32-34	4 1/2
34-36	4 1/2
36-38	4 1/2
38-40	4 1/2
40-42	4 1/2
42-44	4 1/2
44-46	4 1/2
46-48	4 1/2
48-50	4 1/2
50-52	4 1/2
52-54	4 1/2
54-56	4 1/2
56-58	4 1/2
58-60	4 1/2
60-62	4 1/2
62-64	4 1/2
64-66	4 1/2
66-68	4 1/2
68-70	4 1/2
70-72	4 1/2
72-74	4 1/2
74-76	4 1/2
76-78	4 1/2
78-80	4 1/2
80-82	4 1/2
82-84	4 1/2
84-86	4 1/2
86-88	4 1/2
88-90	4 1/2
90-92	4 1/2
92-94	4 1/2
94-96	4 1/2
96-98	4 1/2
98-100	4 1/2

OTHER D. S. MEATS	
Regular plates	6-8
Clear plates	4-6
D. S. jowl butts	3-5
S. P. jowls	3-5
Green square jowls	4
Green rough jowls	3 1/2

CHICAGO LARD PRICES

Prices of cash, loose and leaf lard on the Chicago Board of Trade:

	Cash	Loose	Leaf
Saturday, Mar. 29	5.75n	4.90b	4.87 1/2n
Monday, Mar. 25	5.77 1/2n	4.87 1/2ax	4.87 1/2n
Tuesday, Mar. 26	5.55n	4.62 1/2ax	4.62 1/2n
Wednesday, Mar. 27	5.55n	4.62 1/2n	4.62 1/2n
Thursday, Mar. 28	5.62 1/2n	4.70n	4.75n
Friday, Mar. 29	5.52 1/2n	4.62 1/2b	4.62 1/2n

Packers' Wholesale Prices

Refined lard, tierces, f.o.b. Chgo.	6.62 1/2
Kettle rend., tierces, f.o.b. Chgo.	7.62 1/2
Leaf, kettle rend., tierces, f.o.b. Chgo.	7.62 1/2
Neutral, tierces, f.o.b. Chicago	7.37 1/2
Shortening, tierces, c.a.f.	9.50

FUTURE PRICES

SATURDAY, MARCH 23, 1940

	Open	High	Low	Close
LARD—				
Mar.	5.80	5.82 1/2	5.80	5.70ax
May	5.97 1/2	6.05	5.97 1/2	6.05ax
July	6.20	6.22 1/2	6.20	6.22 1/2b
Sept.	6.27 1/2	6.30	6.27 1/2	6.30b
Oct.	6.27 1/2	6.30	6.27 1/2	6.30b
Sales: May, 11; July, 9; Sept., 18; Oct., 3; total, 41 sales.				
Open interest: May, 1,251; July, 949; Sept., 894; Oct., 103; total, 3,195 lots.				

CLEAR BELLIES—	
May	5.55n
July	6.27 1/2

MONDAY, MARCH 25, 1940

	Open	High	Low	Close
LARD—				
Mar.	5.77 1/2	5.85	5.77 1/2	5.72 1/2b
May	6.00	6.05	6.00	6.05ax
July	6.20	6.27 1/2	6.20	6.22 1/2b
Sept.	6.27 1/2	6.35	6.27 1/2	6.32 1/2ax
Oct.	6.27 1/2	6.35	6.27 1/2	6.32 1/2ax
Sales: May, 27; July, 12; Sept., 49; Oct., 7; total, 95 sales.				
Open interest: May, 1,227; July, 949; Sept., 893; Oct., 103; total, 3,212 lots.				

CLEAR BELLIES—	
May	5.55b
July	6.27 1/2b

TUESDAY, MARCH 26, 1940

	Open	High	Low	Close
LARD—				
Mar.	5.75	5.75	5.75 1/2	5.50ax
May	5.97 1/2	6.07 1/2	5.97 1/2	5.87 1/2b
July	6.17 1/2	6.17 1/2	6.17 1/2	5.77 1/2b
Sept.	6.17 1/2	6.17 1/2	6.17 1/2	6.00ax
Oct.	6.20	6.20	6.07 1/2	6.07 1/2
Sales: May, 42; July, 29; Sept., 63; Oct., 11; total, 145 sales.				
Open interest: May, 1,202; July, 962; Sept., 960; Oct., 112; total, 3,236 lots.				

May	...	...	...	5.50ax
July	6.25	...	...	6.25ax

MEAT AND SUPPLIES PRICES

Chicago

WHOLESALE FRESH MEATS

Carcass Beef		Cor. week,
Week ended		1939
March 27, 1940		per lb.
Prime native steers—		
400-600	18 1/2 @ 19	20 @ 20 1/2
600-800	18 1/2 @ 19	20 @ 20 1/2
800-1000	18 1/2 @ 19	20 @ 21
Good native steers—		
400-600	15 1/2 @ 16 1/2	17 @ 17 1/2
600-800	15 1/2 @ 16 1/2	17 @ 17 1/2
800-1000	15 1/2 @ 16 1/2	17 @ 17 1/2
Medium steers—		
400-600	14 1/2 @ 15 1/2	14 1/2 @ 15
600-800	14 1/2 @ 15 1/2	14 1/2 @ 15
800-1000	14 1/2 @ 15 1/2	14 1/2 @ 15
Heifers, good, 400-600—		
400-600	11 @ 11 1/2	12 @ 13 1/2
Fore quarters, choice—		
400-600	13 @ 14	16 1/2

Beef Cuts

Steer loins, prime—		unquoted
Steer loins, No. 1	33	32
Steer loins, No. 2	28	27
Steer short loins, prime—		unquoted
Steer short loins, No. 1	43	50
Steer short loins, No. 2	35	51
Steer loin ends, (hips)	24	24
Steer loin ends No. 2	22	23
Cow loins—		
Cow loins	17 1/2	20
Steer ribs, prime—		unquoted
Steer ribs, No. 1	25	24
Steer ribs, No. 2	25	21
Cow ribs, No. 3—		
Cow ribs, No. 3	12 1/2	13 1/2
Steer rounds, prime—		unquoted
Steer rounds, No. 1	16 1/2	16 1/2
Steer rounds, No. 2	16	17 1/2
Steer chucks, prime—		unquoted
Steer chucks, No. 1	13 1/2	16
Steer chucks, No. 2	12 1/2	15
Cow rounds—		
Cow rounds	13 1/2	13
Steer plates—		
Steer plates	7 1/2	12
Medium plates—		
Briskets, No. 1	12	15
Cow navel ends—		
Cow navel ends	8	9
Fore shanks—		
Fore shanks	8 1/2	9
Hind shanks—		
Hind shanks	6 1/2	7 1/2
Strip loins, No. 1 buns—		
Strip loins, No. 2	50	50
Sirloin butts, No. 1—		
Sirloin butts, No. 2	25	22
Beef tenderloins, No. 1—		
Beef tenderloins, No. 2	55	50
Rump butts—		
Rump butts	15	16
Flank steaks—		
Flank steaks	21	20
Shoulder clods—		
Shoulder clods	16	17 1/2
Hanging tenderloins—		
Hanging tenderloins	17	18
Insides, green, 5@8 lbs.—		
Insides, green, 5@8 lbs.	18	17 1/2
Knuckles, green, 5@6 lbs.—		
Knuckles, green, 5@6 lbs.	17	17 1/2

Beef Products

Brains	6	7
Hearns	8	10
Tongues	18	20
Sweetbreads	17	17
Or-tail	12	12
Fresh tripe, plain	10	10
Fresh tripe, H. C.	11 1/2	11 1/2
Livers	20	20
Kidneys	9	10

Veal

Choice carcass	17	16 @ 17
Good carcass	15 @ 16	14 @ 15
Good saddles	20 @ 21	20 @ 21
Good racks	14	13 @ 14
Medium racks	10 @ 11	14

Veal Products

Brains, each	10	10
Sweetbreads	30	30
Calf livers	45	55

Lamb

Choice lambs	19	17
Medium lambs	18	16
Choice saddles	23	21
Medium saddles	22	20
Choice fores	16	15
Medium fores	15	14
Lamb fries	32	31
Lamb tongues	17	16
Lamb kidneys	15	20

Mutton

Heavy sheep	7	9
Light sheep	10	11
Heavy saddles	13	13
Light saddles	13	15
Heavy fores	5	7
Light fores	7	8
Mutton legs	13	15
Mutton loins	10	11
Mutton stew	6	6
Sheep tongues	10	12 1/2
Sheep heads, each	11	10

Fresh Pork and Pork Products

Pork loins, 8-10 lbs. av.	12	18
Picnics	9	13
Skinned shoulders	9 1/2	14
Tenderloins	22	32
Spare ribs	8	13
Back fat	5 1/2	8
Boston butts	11	16
Boneless butts, cellar	14	20
trim, 2@4	14	20
Hocks	8	10
Tails	5	10
Neck bones	4	4
Slip bones	9	11
Blade bones	9	11
Pigs' feet	4	4
Kidneys, per lb.	6	10
Livers	7	10
Brains	7	9
Ears	4	4
Snouts	4	4
Heads	6	6 1/2
Chitterlings	6 1/2	6 1/2

WHOLESALE SMOKED MEATS

Fancy regular hams, 14@16 lbs.	16 @ 17
parment paper	17
Fancy skinned hams, 14@16 lbs.	16 @ 18
parment paper	17
Standard reg. hams, 14@16 lbs. plain	15 @ 16
Picnics, 4@8 lbs., short shank, plain	11 @ 12
Picnics, 4@8 lbs., long shank, plain	9 @ 10
Fancy bacon, 6@8 lbs. plain	16 1/2 @ 17
Standard bacon, 6@8 lbs. plain	13 @ 14
No. 1 beef sets, smoked	
Insides, 8@12 lbs.	34 1/2 @ 35 1/2
Outsides, 5@9 lbs.	33 @ 34
Knuckles, 5@9 lbs.	32 @ 33
Cooked hams, choice, skin on, fattened	27
Cooked hams, choice, skinned, fattened	30
Cooked picnics, skin on, fattened	22
Cooked picnics, skinned, fattened	22

VINEGAR PICKLED PRODUCTS

Pork feet, 200-lb. bbl.	\$15.75
Lamb tongue, short cut, 200-lb. bbl.	65.00
Regular tripe, 200-lb. bbl.	17.25
Honeycomb tripe, 200-lb. bbl.	22.25
Pocket honeycomb tripe, 200-lb. bbl.	26.00

BARRELED PORK AND BEEF

Clear fat back pork:	
70-80 pieces	\$11.50
80-100 pieces	10.50
100-125 pieces	10.00
Clear plate pork	12.00
Bean pork	12.00n
Brisket pork	17.00n
Plate beef	16.50
Extra plate beef	16.50

SAUSAGE MATERIALS

(Packed basis.)

Regular pork trimmings	5
Special lean pork trimmings 85%	10 1/2
Extra lean pork trimmings 95%	12
Pork cheek meat (trimmed)	7 1/2
Pork hearts	4 1/2
Pork livers	3 1/2 @ 4
Native boneless bull meat (heavy)	13 @ 13 1/2
Boneless chucks	11 1/2 @ 11 1/2
Shank meat	11 1/2 @ 11 1/2
Beef trimmings	8 1/2 @ 8 1/2
Beef cheeks (trimmed)	7 1/2
Dressed canners, 350 lbs. and up	9 @ 9 1/2
Dressed canner cows, 400-450-lb.	9 1/2 @ 9 1/2
Dr. Bologna bulls, 600 lbs. and up	10 @ 10 1/2
Pork tongues, canner trim, fresh	6

DOMESTIC SAUSAGE

(Quotations cover fancy grades.)

Pork sausage, in 1-lb. carton	20 1/2
Country style sausage, fresh in link	15 1/2
Country style sausage, fresh in bulk	15 1/2
Country style sausage, smoked	19 1/2
Frankfurters, in sheep casings	22 1/2
Frankfurters, in hog casings	20 1/2
Bologna in beef bungs, choice	16
Bologna in beef middles, choice	16 1/2
Liver sausage in beef rounds	15
Liver sausage in hog bungs	16
Smoked liver sausage in hog bungs	21 1/2
Head cheese	14 1/2
New England luncheon specialty	20
Mince luncheon specialty, choice	18
Tongue & blood	17
Blood sausage	17
Souse	16
Polish sausage	20 1/2

DRY SAUSAGE

Cervelat, choice, in hog bungs	34
Thuringer	19
Farmer	26
Holsteiner	26
B. C. salami, choice	30
Milano, salami, choice, in hog bungs	27
B. C. salami, new condition	17
Frisesa, choice, in hog middles	29
Genoa style salami, choice	36
Pepperoni	26
Mortadella, new condition	18
Capicola	26
Italian style hams	26
Virginia hams	40 1/2

CURING MATERIALS

	Cwt.
Nitrite of soda (Chgo. w'less stock).	
In 425-lb. bbls., delivered	\$ 8.75
Saltpeter, less than ton lots:	
Dbl. refined granulated	7.50
Small crystals	8.50
Medium crystals	8.75
Large crystals	9.50
Dbl. rfd. gran. nitrate of soda	2.90
Salt, per ton, in minimum car of 80,000 lbs.	
only, f.o.b. Chicago, per ton:	
Granulated	7.20
Medium, dried	10.20
Rock	6.80
Sugar—	
Raw, 96 basis, f.o.b. New Orleans	2.83
Standard gran., f.o.b. refiners (2%)	4.50
Packers' curing sugar, 250 lb. bags,	
f.o.b. Reserve, La., less 2%	4.10
Dextrose, in car lots, per cwt. (Cotton)	3.64
In paper bags	3.53

SAUSAGE CASINGS

(F. O. B. Chicago.)

(Prices quoted to manufacturers of sausage.)	
Beef casings:	
Domestic rounds, 180 pack	.16
Domestic rounds, 140 pack	.38
Export rounds, wide	.42
Export rounds, medium	.24
Export rounds, narrow	.39
No. 1 wessands	.05
No. 2 wessands	.03
No. 1 bungs	.11
No. 2 bungs	.08
Middles, regular	.50
Middles, select, wide, 2@2 1/2 in.	.55
Middles, select, extra, 2 1/2 in. & up	.75
Dried bladders:	
12-15 in. wide, flat	.80
10-12 in. wide, flat	.55
8-10 in. wide, flat	.35
6-8 in. wide, flat	.25
Pork casings:	
Narrow, per 100 yds.	2.15
Narrow, special, per 100 yds.	2.00
Medium, regular	1.55
English, medium	1.45
Wide, per 100 yds.	1.35
Extra wide, per 100 yds.	1.00
Export bungs	.19
Large prime bungs	.14
Medium prime bungs	.07
Small prime bungs	.08 1/2
Middles, per set	.14

SPICES

(Basis Chicago, original bbls., bags or bales.)

	Whole.	Ground.
Allspice, prime	20 1/2	22
Refined	21	23
Oni pepper	23	23
Powder	23	23
Cloves, Amboyana	28 1/2	34 1/2
Zanzibar	19	24
Ginger, Jamaica	14	18 1/2
African	63	13 1/2
Mace, Fancy Banda	63	13 1/2
East India	57	65
East & West India Blend	59	65
Mustard flour, fancy	25	25
No. 1	19	19
Nutmeg, fancy Banda	24	29
East India	20 1/2	25
East & West India Blend	22	22
Paprika, Spanish	42	42
Paprika, Hungarian	38	38
No. 1 Hungarian	35 1/2	35 1/2
Pepper, Cayenne	48	48
Red No. 1	21	21
Black Malabar	10	14
Black Lampong	6	7 1/2
Pepper, white Singapore	9 1/2	12 1/2
Mustok	9 1/2	13
Packers	12	12

SEEDS AND HERBS

	Whole.	for Saus.	Ground
Caraway seed	14 1/2	14 1/2	19 1/2
Celery seed, French	24	24	28
Cominos seed	20	20	20
Coriander Morocco bleached	7	7	7
Coriander Morocco natural No. 1	6 1/2	6 1/2	8 1/2
Mustard seed fancy yellow	21	21	21
American	14	14	14
Marjoram, French	28	28	34
Oregano	12	12	16
Sage fancy Dalmatian	12 1/2	12 1/2	16 1/2
Dalmatian No. 1	11 1/2	11 1/2	15 1/2

(Continued on page 29.)

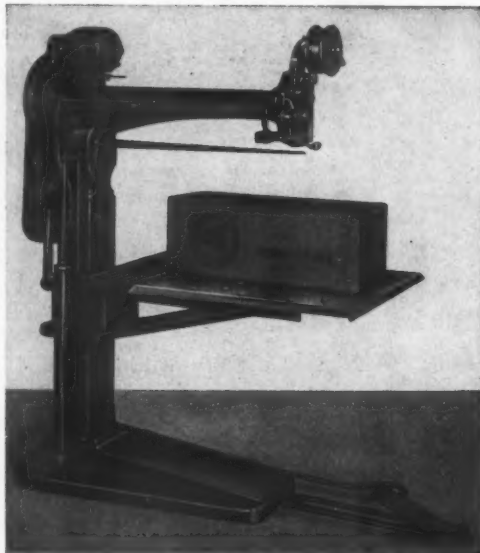
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A. P. CALLAHAN & COMPANY

2407 SOUTH LA SALLE STREET

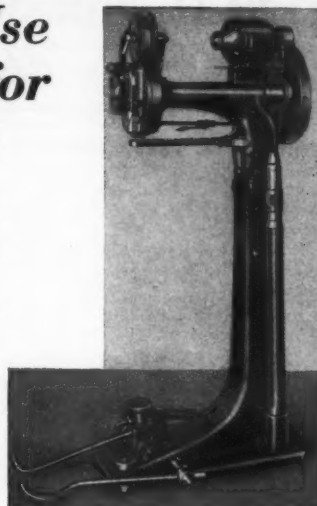
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The BLISS TOP STITCHER quickly stitches the top of the box after it is packed.

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Here's a real profit-making machine for medium size establishments. An efficient, economical, automatic unit with new *Continuous Feed* that operates from any electric socket—pays for itself in a short time.

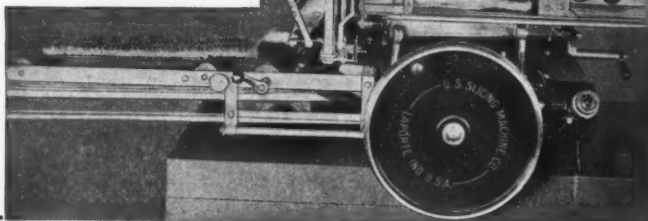
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Literature with complete details on request.

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General Office: 2145 Central Parkway, Cincinnati, Ohio

Factory: 1972-2008 Central Ave., Cincinnati, Ohio
824 Exchange Ave., U. S. Yards, Chicago, Ill.

MARKET PRICES

New York

DRESSED BEEF

City Dressed

Choice, native, heavy	17½	@18½
Choice, native, light	17½	@19½
Native, common to fair	16	@17

Western Dressed Beef

Native steers, 600@800 lbs.	18	@19
Native choice yearlings, 440@600 lbs.	17	@18
Good to choice heifers	16	@17
Good to choice cows	14	@15
Common to fair cows	13	@14
Fresh bologna bulls	13	@14

BEEF CUTS

	Western	City
No. 1 ribs	23 @24	21 @23
No. 2 ribs	20 @21	20 @21
No. 3 ribs	19 @20	19 @20
No. 1 loins	32 @36	36 @40
No. 2 loins	26 @32	30 @35
No. 3 loins	20 @24	25 @29
No. 1 hinds and ribs	20 @21	21 @24
No. 2 hinds and ribs	18 @19	19 @21
No. 1 rounds	17 @17	17 @17
No. 2 rounds	16 @16	16 @16
No. 3 rounds	15 @15	15 @15
No. 1 chucks	14 @15	14 @15
No. 2 chucks	14 @14	14 @14
No. 3 chucks	13 @13	13 @13
City dressed bolognas	13½	@14½
Rolls, reg. 4@6 lbs. av.	18	@20
Rolls, reg. 6@8 lbs. av.	23	@25
Tenderloins, 4@6 lbs. av.	50	@60
Tenderloins, 5@6 lbs. av.	50	@60
Shoulder clods	16	@18

DRESSED VEAL

Good	16@17
Medium	15@16
Common	14@15

DRESSED SHEEP AND LAMBS

Genuine spring lambs, good	23	@25
Genuine spring lambs, good to medium	22	@23
Genuine spring lambs, medium	21	@22
Winter lambs, good	19½	@20½
Winter lambs, good and medium	18½	@19½
Winter lambs, medium	18	@18½
Sheep, good	11	@13
Sheep, medium	9	@11

DRESSED HOGS

Hogs, good and choice (110-140 lbs.)	
head on; leaf fat in	\$ 8.50 @ 9.00
Pigs, small lots (60-110 lbs.)	
head on; leaf fat in	10.00 @ 10.75

FRESH PORK CUTS

Pork loins, fresh, Western 10@12 lbs.	12	@12½
Shoulders, Western, 10@12 lbs. av.	10	@11
Butts, regular, Western	12	@13
Hams, Western, fresh, 10@12 lbs. av.	16	@17
Picnics, Western, fresh, 6@8 lbs. av.	9	@10
Pork trimmings extra lean	14½	@15½
Pork trimmings, regular, 50% lean	8	@9
Spareribs	8½	@9½

COOKED HAMS

Cooked hams, choice, skin on, fattened	33c
Cooked hams, choice, skinless, fattened	35c

SMOKED MEATS

Regular hams, 8@10 lbs. av.	19½	@20
Regular hams, 10@12 lbs. av.	19	@20
Regular hams, 12@14 lbs. av.	18	@19
Skinned hams, 10@12 lbs. av.	20	@21
Skinned hams, 12@14 lbs. av.	18½	@19
Skinned hams, 16@18 lbs. av.	17½	@18
Skinned hams, 18@20 lbs. av.	17	@18
Picnics, 6@8 lbs. av.	13	@14
Picnics, 8@10 lbs. av.	12½	@13
City pickled bellies, 8@12 lbs. av.	15	@16
Bacon, boneless, Western	17	@18
Bacon, boneless, city	16	@17
Rollettes, 8@10 lbs. av.	17	@18
Beef tongue, light	22	@23
Beef tongue, heavy	23	@24

FANCY MEATS

Fresh steer tongues, untrimmed	16c	a pound
Fresh steer tongues, l. c. trimmed	28c	a pound
Sweetbreads, beef	34c	a pound
Sweetbreads, veal	70c	a pair
Beef kidneys	12c	a pound
Mutton kidneys	4c	each
Livers, beef	29c	a pound
Ortals	16c	a pound
Beef hanging tenders	30c	a pound
Lamb fries	12c	a pair

BUTCHERS' FAT

Shop Fat	\$1.50	per cwt.
Breast Fat	2.00	per cwt.
Edible Suet	3.00	per cwt.
Inedible Suet	2.50	per cwt.

GREEN CALFSKINS

	5-9	9½-12½	12½-14	14-18	18 up
Prime No. 1 veals	22	2.85	3.20	3.25	3.70
Prime No. 2 veals	20	2.55	2.90	2.95	3.30
Buttermilk No. 1	17	2.35	2.70	2.75	....
Buttermilk No. 2	16	2.20	2.55	2.60	....
Branded gruby	10	1.15	1.50	1.55	1.75
Number 5	10	1.15	1.50	1.55	1.75

WHOLESALE DRESSED MEAT PRICES

Wholesale prices of Western dressed meats, quoted by the U. S. Department of Agriculture, Agricultural Marketing Service, on March 27, 1940:

Fresh Beef:	CHICAGO	BOSTON	NEW YORK	PHILA.
STEER, Choice ¹ :				
400-500 lbs.	\$15.50@17.00			
500-600 lbs.	15.50@17.00		\$16.50@17.50	\$17.00@17.50
600-700 lbs.	15.00@17.00	\$15.50@16.50	16.00@17.00	16.50@17.50
700-800 lbs.	15.00@16.50	15.50@16.50	16.00@17.00	16.50@17.00
STEER, Good ¹ :				
400-500 lbs.	13.50@15.50			
500-600 lbs.	13.50@15.50		14.00@16.00	14.50@16.00
600-700 lbs.	13.00@15.00	14.00@15.50	14.00@16.00	14.50@16.00
700-800 lbs.	13.00@15.00	14.00@15.50	14.00@16.00	14.50@16.00
STEER, Commercial ¹ :				
400-600 lbs.	12.50@13.50		13.00@14.00	13.00@14.50
600-700 lbs.	12.00@13.00	13.00@14.00	13.00@14.00	13.00@14.50
STEER, Utility ¹ :				
400-600 lbs.	11.50@12.50			
COW (all weights):				
Commercial	11.50@12.50			
Utility	10.50@11.50	11.50@12.50	11.50@12.50	11.00@12.00
Cutter	9.75@10.50	10.50@11.50	10.50@11.50	10.50@11.00
Canner	9.25@ 9.75			
Fresh Veal and Calf:				
VEAL (all weights) ² :				
Choice	14.50@16.00	15.50@17.00	16.00@17.00	16.00@17.00
Good	13.00@14.50	14.00@15.50	14.00@16.00	14.00@16.00
Medium	11.50@13.00	13.00@14.00	12.00@14.00	12.00@14.00
Common	9.50@11.50	11.50@13.00	11.00@12.00	11.00@12.00
CALF (all weights) ² :				
Choice				
Good				
Medium				
Common				
Fresh Lamb and Mutton:				
LAMB, Choice:				
38 lbs. down	18.00@19.00	19.00@20.00	19.00@20.00	19.00@20.00
39-45 lbs.	17.00@18.00	18.50@19.50	18.00@19.00	18.50@19.50
46-55 lbs.	16.00@17.00	17.50@18.50	17.50@18.50	18.00@19.00
LAMB, Good:				
38 lbs. down	17.00@18.00	18.00@19.00	18.00@19.00	18.00@19.00
39-45 lbs.	16.00@17.00	17.50@18.50	17.00@18.00	17.50@18.50
46-55 lbs.	15.00@16.00	16.50@17.50	16.50@17.50	17.00@18.00
LAMB, Medium:				
All weights	14.50@16.00	16.00@18.00	16.00@18.00	17.00@18.00
LAMB, Common:				
All weights	13.50@14.50	15.00@17.00	15.00@17.00	....
MUTTON (Ewe), 70 lbs. down:				
Good	9.00@10.00	10.00@11.00	10.00@11.00	....
Medium	8.00@ 9.00	9.00@10.00	9.00@10.00	....
Common	7.00@ 8.00	8.00@ 9.00	8.00@ 9.00	....
Fresh Pork Cuts:				
LOINS:				
8-10 lbs.	10.50@11.50	12.50@13.00	12.00@12.50	12.00@13.00
10-12 lbs.	10.50@11.50	12.50@13.00	12.00@12.50	12.00@13.00
12-15 lbs.	10.00@11.00	12.00@12.50	11.50@12.00	11.50@12.50
16-22 lbs.	10.00@10.50	11.00@12.00	10.00@10.50	11.00@12.00
SHOULDERS, Skinned N. Y. Style:				
8-12 lbs.	9.00@ 9.50		10.00@10.50	9.00@10.00
PICNICS:				
6-8 lbs.	8.00@ 8.50	10.00@10.50	....	....
BUTTS, Boston Style:				
4-8 lbs.	10.00@10.50		12.00@12.50	12.00@12.50
SPARE RIBS:				
Half Sheets	7.00@ 7.50		....	....
TRIMMINGS:				
Regular	5.50@ 6.00		....	....

¹Includes heifer 300-450 lbs. and steer down to 300 lbs. at Chicago. ²"Skin on" at New York and Chicago. ³Includes sides at Boston and Philadelphia.

Steam and Power Costs

(Continued from page 13.)

penalized by a low power factor.

4.—Cutting lighting costs by the intelligent selection of lighting units properly spaced and arranged to give the desired amount of illumination with the least consumption of electricity.

5.—Generating power as a by-product of the processing steam demand, if the cost of purchased power exceeds 1½¢ per k.w.h.

How large must a meat plant be to effect a saving of \$5,000 yearly in power

plant costs? What will it cost to make this saving? How long will it take to get back in savings the initial investment in power plant modernization?

These are questions that cannot be answered offhand. Answers can be arrived at, however, by a survey made by a competent, unbiased consulting engineer.

It is "penny wise and pound foolish" for the small packer with a volume of business of 18,000,000 to 20,000,000 lbs. of product to continue to ignore the possibilities of savings in his power plant.

Wartime Meat Handling

(Continued from page 11.)

B.—Since the labor of packing and preparing meat is done in the country of production, the consuming population, as well as the Navy and Army, receive a product which requires much less man power to prepare it for ultimate consumption. This means that a considerable number of men may be released from the task of cutting, weighing, trimming, etc., of defrosted meats, whether for the civilian population or for the Army and Navy.

C.—Since the product is shipped overseas, it is important to utilize every cubic foot of shipping space to the best advantage. More pounds per cubic foot of space may be shipped under this plan than with the old method. Actually, at least two and one-half times more meat can be shipped under this method than was formerly possible.

D.—The quality of quick-frozen meats, which are properly packaged, will be much better than slow or sharp-frozen meat.

E.—The physical distribution in the belligerent countries will be greatly facilitated by the use of a smaller package. Instead of requiring skilled butchers, the final handling may be done by unskilled labor, or if needs be, by women.

Following is an excerpt pertinent to the question of quick-frozen supplies from an article published in *Food Industries* of October, 1939, by Major Paul

P. Logan, Quartermaster Corps, U. S. Army.

The real problem which will confront the food industry in a future major emergency will be the necessity of changing from normal process in order to provide special forms of foods required to be prepared and packaged in a manner calculated to best conserve space and weight, to lower storage loss, to minimize the hazard of contamination by poison gas, and at the same time be nutritious, palatable, and well adapted to field cooking.

Since the Quartermaster Corps is charged with the feeding of the Army, it not only attempts to keep abreast of commercial developments in the food world but also conducts considerable research work in battlefield rations.

Meat Packed in Boxes

One experiment conducted by the Corps is recited here to show the extent of space and weight which can be saved in the shipment of fresh meat. A quantity of carcass beef of standard Army quality was trimmed and boned. The meat was divided into two classes, one called "roasting and frying," the other called "stewing and boiling." Large pieces, such as chuck and loin, were cut into pieces of average cooking size, and each piece wrapped in wax paper.

Each class of meat was packed separately in 50- and 100-lb. lots, in flat telescope boxes made of waxed fiberboard. The boxes were leveled under pressure, and the meat frozen solid at

a low temperature. Ordinarily, 134 cu. ft. of space is required for storage of 1 ton of regularly frozen carcass beef, but for the beef processed in the manner described, only 32 cu. ft. of space was required; a saving of over 400 per cent.

In the boning and trimming process, it was found that 2,650 lbs. of beef was required to produce 2,000 lbs. of boned-out meat. The tallow and bones which were removed had sufficient commercial value nearly to offset the cost of processing. A skilled laborer could bone out three cattle per hour, or 24 per day.

The use of this system would accomplish a daily saving of 22,000 cu. ft. of shipping space, and approximately 125,000 lb. of shipping weight. It would provide the further advantage of supplying fresh beef better adapted to field cooking than frozen carcass beef and would leave in the home area material of commercial value which would be largely wasted at the front. Forty skilled laborers could process 500,000 lb. daily.

CHAIN STORE SALES

Sales of Safeway Stores, Inc., for the four weeks ended March 16 totaled \$30,431,270, a gain of 6.2 per cent over sales for the corresponding 1939 period. For the 12 weeks ended March 16, the company's sales totaled \$87,510,186, marking an advance of 6.5 per cent over the like period last year.

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Tallow and Greases Steady to Lower in Quiet Trading

Week marked by less soaper interest in lard, but situation continues sensitive to lard developments—Tallow interest centers on nearby material—Greases and by-products easier.

TALLOW.—The tallow market was fairly active and slightly steadier at New York this week, although prices showed no change. It was estimated that about 750,000 lbs. of extra sold to soapers at 4½¢ delivered, the same levels as prevailed latelast week. Demands was better and pressure from producers lighter, making for a maintenance of values, but the situation continued sensitive to developments in lard, although less was heard this week of soaper interest in loose lard supplies. At the same time, interest in tallow was almost entirely for nearby stuff, little being said of April or May delivery tallow.

There are indications in the market that producers were in a satisfactory position on March production, and were sold up for part of April, but that all of the possible April production has not been disposed of as yet.

At New York, edible was quoted at 5½¢ nominal; extra, 4½¢ delivered, and special, 4½¢.

The Chicago tallow market this week was extremely dull and quiet, influenced by the depressed condition of the lard market and other factors. Large buyers have shown a tendency to drop out of the market for any material prior to May delivery, and a nominal situation in tallows prevailed toward the close of the week. A tank of prime tallow was reported early in week at 4½¢, Chicago, prompt; subsequent offerings of prime at 4½¢ found no takers, with buyers' ideas around 4½¢. A little special tallow sold toward midweek at 4½¢, Cincinnati, April, but demand subsequently dried up, although this amount had been bid for April special at Cincinnati earlier in week. A bid of 4½¢, Southeast point, was reported at midweek for No. 3 tallow. Quotations on Thursday at Chicago were:

Belbie tallow	4½¢@4½¢
Fancy tallow	4½¢@4½¢
Prime packers	4½¢@4½¢
Special tallow	4½¢@4½¢
No. 1 tallow	4½¢@4½¢

STEARINE.—The market for oleo stearine was quiet and quotably unchanged at New York, but there was a feeling that the next business passing would be at lower levels. Sellers were asking 6¢.

At Chicago, the market was slow, but steady. Prime oleo was quoted at 5½¢.

OLEO OIL.—Demand continued quiet at New York, but prices remained unchanged. Extra was quoted at 7¢;

prime, 6½¢@¾¢ and lower grades, 6½¢@6½¢.

At Chicago, trade was dull, but prices steady. Extra oleo oil was quoted at 7¢.

LARD OIL.—Demand was quiet at New York, and prices were lowered from ¾¢@¾¢. No. 1 was quoted at 8¢; No. 2, 7½¢; extra, 8½¢; extra, No. 1, 8½¢; extra winter strained, 8½¢; prime burning, 9½¢, and inedible, 8½¢.

At Chicago, lard oil quotations were as follows: No. 1, 7½¢; No. 2, 7½¢; extra, 8¢; extra No. 1, 7½¢; extra winter strained, 8½¢; special No. 1, 7½¢; prime edible, 9½¢; prime burning, 9¢; and prime inedible, 8½¢. Acidless tallow oil was quoted at 7½¢.

(See page 35 for later markets.)

NEATSFOOT OIL.—Demand was slow at New York and prices were down from ¾¢@¾¢ from the previous week. Cold test was quoted at 17½¢; extra, 8½¢; No. 1, 8¢; pure, 13½¢ and prime, 8½¢.

Neatsfoot oil quotations at Chicago were: Cold test, 17½¢; extra, 8½¢; No. 1, 7½¢; prime, 8½¢; and pure, 12½¢.

GREASES.—A moderately active trade but an easy market featured greases at New York this week. Sales of yellow and house were reported at 4½¢, off ½¢ from the previous week. Indications were that some small additional quantities were available at that level, but producers were not pressing offerings, and again there were indications that more export business is going on in greases than is being reported. However, with tallow and lard barely steady, and with lower foreign exchanges creating fear of diminished foreign demands, a slightly easier tone developed in greases.

At New York, choice white was quoted at 4½¢; yellow and house, 4½¢@½¢, and brown, 4½¢@½¢.

Chicago grease market was quiet and sluggish this week, with prices tending a little easier. Following the weekend holiday, no particular activity developed in this market; dullness early in the week was accentuated by the sharp downturn in lard. White grease was freely offered at Chicago toward end of week at 4½¢, Chicago, with bids lacking. Several tanks of yellow grease sold Thursday at 4½¢, Chicago and St. Louis, for April delivery, while another tank sold at the same price for prompt. Brown grease was salable this week at 4½¢, Cincinnati, for April. Thursday's quotations at Chicago were as follows:

Choice white grease	4½¢@4½¢
A-white grease	4½¢@4½¢
B-white grease	4½¢@4½¢
Yellow grease, 10-15 f.f.a.	4½¢@4½¢
Yellow grease, 16-20 f.f.a.	4½¢@4½¢
Brown grease	4½¢@4½¢

BY-PRODUCTS MARKETS

Chicago, March 28, 1940.

By-products continue quiet and generally nominal; some items a little easier this week.

Blood.

Blood nominally quoted in range shown.

	Unit
	Ammonia
Unground	\$ 2.65@ 2.75

Digester Feed Tankage Materials.

Sales of 11-12% tankage reported late in week at \$2.75, midwest points; nominally quoted around \$2.75, Chgo.

Unground, 11 to 12% ammonia	\$ @ 2.75
Unground, 6 to 10%, choice quality	2.90@ 3.10
Liquid stick	1.25@ 1.50

Packhouse Feeds.

A little more action reported in this market; prices unchanged.

	Carlots,	Per ton
60% digester tankage	\$	@45.00
50% meat and bone scraps		@47.50
Blood-meal		@55.00
Special steam bone-meal		@45.00

Bone Meals (Fertilizer Grades).

Nominally unchanged.

	Per ton
Steam, ground, 3 & 50	\$ @30.00
Steam, ground, 2 & 26	@30.00

Fertilizer Materials.

This market about steady at last week's levels.

	Per ton
High grd. tankage, ground, 10@11% am.	\$ 2.65@ 2.75 & 10c
Bone tankage, ungrd., per ton	18.00@20.00
Hoof meal	@ 2.25

Dry Rendered Tankage.

Low and high test cracklings remain largely nominal at last week's levels.

	Per ton
Hard pressed and expeller unground, up to 48% protein (low test)	\$.70 @.72½
above 48% protein (high test)	.65 @.67½
Soft prod. pork, ac. grease and quality, ton	@47.50
Soft prod. beef, ac. grease and quality, ton	35.00@37.50

Gelatine and Glue Stocks.

Market quiet and about unchanged.

	Per ton
Calf trimmings	\$ @20.00
Sinews, pizzles	@18.00
Cattle jaws, skulls and knuckles	@35.00
Hide trimmings	13.00@14.00
Pig skin scraps and trim, per lb., l.c.l.	3½¢ @ 3½¢

Bones and Hoofs.

Market firm at last week's quotations.

	Per ton
Round shins, heavy	\$ @57.50
light	@52.50
Flat shins, heavy	@47.50
light	@42.50
Blades, buttocks, shoulders & thighs	@42.50
Hoofs, white	@55.00
House run, unsorted	@30.00
Junk bones	20.00@22.50

Animal Hair.

Animal hair market quiet and unchanged.

Winter coll dried, per ton	\$30.00@35.00
Summer coll dried, per ton	@22.50
Winter processed, black, lb.	6½¢ @ 7c
Winter processed, gray, lb.	5½¢ @ 6c
Summer processed, gray, lb.	3 @ 3½¢
Cattle switches	2½¢ @ 2½¢

FERTILIZER PRICES

BASIS NEW YORK DELIVERY

Ammoniates

Ammonium sulphate, bulk, per ton, basis ex-vessel Atlantic ports, April to June, 1940.	\$28.00
Blood, dried, 16% per unit.	2.75
Unground fish scrap, dried, 11½% ammonia, 16% B. P. L., f.o.b. fish factory.	3.25 & 10c
Fish meal, foreign, 11½% ammonia, 10% B. P. L., c.i.f. spot.	52.00
April shipment.	52.00
Fish scrap, acidulated, 7% ammonia, 3% A. F. A., f.o.b. fish factories.	2.50 & 50c
Soda nitrate, per net ton: bulk, April to June, 1940, inclusive, ex-vessel Atlantic and Gulf ports.	27.00
in 200-lb. bags.	28.30
in 100-lb. bags.	29.00
Fertilizer tankage, ground, 10% ammonia, 10% B. P. L. bulk.	2.65 & 10c
Feeding tankage, unground, 10-12% ammonia, 15% B. P. L. bulk.	2.65 & 10c

Phosphates

Foreign bone meal, steamed, 3 and 50 bags, per ton, c.i.f.	32.00
Bone meal, raw, 4½% and 50% in bags, per ton, c.i.f.	31.00
Superphosphate, bulk, f.o.b. Baltimore, per ton, 16% flat.	8.50

Dry Rendered Tankage

50/55% protein, unground.	70c
60% protein, unground.	70c

EASTERN FERTILIZER MARKETS

New York, March 27, 1940.

About 2,000 tons of unground dried menhaden fish scrap were sold for summer delivery at \$3.25 and 10c, basis f.o.b. fish factories, Chesapeake Bay, Va., with both feed and fertilizer buyers being reported.

Both blood and tankage eased in price and buyers showed little disposition to enter the market. The cold weather and snow are holding back shipment of fertilizer, with the result that the season is about two to three weeks late. Cracklings are steady at 70c f.o.b. New York, and the market is in fairly good shape.

CHEMURGIC MEETING HELD

Widening uses for soybeans, latest developments in plastics, and other topics dealing with new applications for farm products were discussed this week at the three-day annual Chemurgic Conference of Agriculture, Industry and Science at the Stevens Hotel, Chicago.

Scientists, manufacturers, railroad executives, publishers and government agricultural experts were among the speakers who addressed sessions of the conference. The general topic of soybeans and their growing industrial importance received much attention.

SOYBEAN OIL FUTURES

A futures market for crude soybean oil will be inaugurated on the New York Produce Exchange in the near future. Contracts will be for 60,000 lbs. each of loose prime crude oil, delivered in licensed, bonded warehouses. Fluctuations in prices will be in hundredths of a cent per pound. Commissions for the round turn will be \$20 to \$24 per contract for members, and \$30 to \$36 for non-members, according to the price of the oil.

Foreign Exchange Movements Depress Cotton Oil Market

Futures under pressure of scattered selling and liquidation; weakness in allied markets a contributing factor—Prices sag about ¼c to near season's lows—Curtailed of foreign buying feared.

COTTONSEED oil futures market at New York was under pressure of scattered selling and liquidation, brought about by a sharp slump in sterling, weakness in allied markets and less aggressive speculative buying power.

Selling of oil against purchases of lard by spreaders placed considerable pressure on oil at times and prices dropped nearly ¼c per lb. from the previous week, to within a few points of the season's lowest levels. Some new buying appeared on the declines, but sentiment was noticeably less confident of values generally, with fears entertained that the foreign exchange developments might serve to curtail foreign buying of oils and fats to some extent, in which case remaining old supplies were more than sufficient for domestic needs and carryover. However, there was a disposition in evidence to keep a watchful eye upon the foreign situation, particularly as it pertains to any spreading of the European war.

Fresh hedge selling was small as crude oil was not moving to any extent, having been pretty well cleared up for the present season. Domestic cash trade was on a fair scale, following reductions of ¼c in cash oil prices and the lowering of shortening by ¼c per lb. on the part of producers. The trade took on a fair amount of supplies, but demand subsequently diminished when prices displayed a tendency to sag to lower levels. The weakness in lard, with the western commodity down to within striking distance of the season's lows, and no particular letup in the hog run, discouraged some longs in oil, and led to selling of September oil against purchases of September lard, on the belief that cottonseed oil was too high in price compared with the latter. Crude oil eased with the futures market.

COCONUT OIL.—Demand was slug-

gish again this week at New York. There was some interest at 3c, with sellers asking 3½c for tanks. On the Pacific coast, bulk oil was quoted at 2½@2¾c.

CORN OIL.—Some business passed at 6¼c but demand subsequently subsided. Offerings continued light. However, buyers lowered their ideas to 6¼c, and even lower than that.

SOYBEAN OIL.—Mill offerings were scanty because of lower prices, but some resales were reported in the New York market at 5¼c. Mills were asking 5½@5¾c.

PALM OIL.—Interest was limited owing to weakness in sterling. Nigre in drums was quoted at 4c, tanks 3½c; 10 per cent acid, 2.85c. Rumors that large shipments are afloat from Africa were current but lacked confirmation. Sumatra was quoted at 3½c spot and 2½c for shipment.

PALM KERNEL OIL.—Nominal.

OLIVE OIL FOOTS.—The market was quiet at New York but steady. Nearby foots were quoted at 7¼c and forward shipment at 7½c.

PEANUT OIL.—Mills were quoting 6¼c. Importers at New York quoted Oriental oil at 4¼c cif New York.

COTTONSEED OIL.—Valley and Southeast quoted Wednesday 5¼c b; Texas, 5½c n at common points; and Dallas, 5½c nominal.

Futures market transactions for the week at New York were:

FRIDAY, MARCH 22, 1940

(HOLIDAY)

SATURDAY, MARCH 23, 1940

(HOLIDAY)

MONDAY, MARCH 25, 1940

—Range—

	Sales	High	Low	—Closing—	
April	...	...	...	670	nom
May	22	675	672	674	nom
June	...	...	...	677	nom
July	4	680	676	678	nom
August	...	...	...	680	nom
September	25	685	680	682	nom
October	1	682	682	680	nom
November	...	...	...	675	nom

Sales 52 contracts.

TUESDAY, MARCH 26, 1940

	Sales	High	Low	—Closing—	
April	...	...	...	650	nom
May	35	671	653	653	nom
June	...	...	...	655	nom
July	47	675	659	659	nom
August	...	...	...	661	nom
September	53	676	661	661	nom
October	6	676	658	658	nom
November	...	...	...	645	nom

Sales 141 contracts.

WEDNESDAY, MARCH 27, 1940

	Sales	High	Low	—Closing—	
April	...	...	...	640	bid
May	21	657	652	654	bid
June	...	...	...	657	nom
July	24	663	656	660	nom
August	...	...	...	662	nom
September	19	665	658	662	nom
October	10	661	600	600	nom
November	...	...	...	645	nom

Sales 74 contracts.

THURSDAY, MARCH 28, 1940

	Sales	High	Low	—Closing—	
May	4	658	655	655	bid
July	13	665	660	660	nom
September	22	669	664	662	nom
October	1	662	662	662	nom

(See page 35 for later markets)

VEGETABLE OILS

Crude cottonseed oil, in tanks, f.o.b. Valley points, prompt.	5½
White deodorized, in bbls., f.o.b. Chicago.	7¼@7½
Yellow, deodorized.	7½
Soap stock, 50% f.f.a., f.o.b. consuming points.	1½
Soybean oil, f.o.b. mills.	5½@5¾
Corn oil, in tanks, f.o.b. mills.	6@6¼
Coconut oil, sellers' tanks, f.o.b. coast.	2¾
Refined coconut, bbls., f.o.b. Chicago.	8¼@8½

OLEOMARGARINE

F. O. B. CHICAGO

White domestic vegetable.	15
White animal fat.	12
Water churned pastry.	12
Milk churned pastry.	13
White "nut" type.	8½

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PREVENTIVE
MAINTENANCE**



"Killing that boiler will cost us real money," shouted the SUPERINTENDENT. "We can't keep up with orders now!"



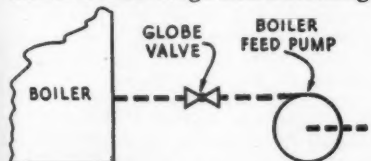
"It might have been lots worse," sighed the PLANT ENGINEER, "... if we hadn't located the trouble in time."



"But, it won't happen again," said the CRANE MAN, "... now that you've applied Preventive Maintenance with the right Crane valve."

THE machinery in a manufacturing plant was humming gaily to the tune of big orders. But one day the hum quieted. One of the high pressure boilers had to be "killed." A valve in the feed water line jammed; the fire had to be pulled or the thirsty boiler would burst.

The valve was a gate with rising stem and solid wedge disc. Throttling



service and the pulsating flow from the feed water pump were more than it could stand. Vibration of the disc cut the stem in two. The disc dropped, and seating itself, tightly shut off the line.

To make repairs by the rule of ordinary maintenance would be folly. Only a valve that would prevent recurrence of such trouble would do. And that's how Preventive Maintenance—rec-

ommended by G. L. C., the Crane Representative—came into the case.

For two sound reasons Preventive Maintenance prescribed a globe valve with plug type disc. *First*, it could be installed with pressure under the disc, and should the valve fail, it would not stop water supply entirely. *Second*, its plug type disc and seat would offer maximum resistance to the severity of throttling service.

Results: (1) the trouble was remedied. (2) The threat of another costly boiler shutdown due to misapplied valves was removed. (3) Another manufacturer has learned that Preventive Maintenance is sound economy; and that Crane offers not only the most complete and dependable source of valves and fittings, but accurate information on application as well. He knows, too, the wisdom of consulting the Crane Salesman on every piping problem—big or little.

This case is based on an actual experience of a Crane Representative in our Oshkosh Branch.

CRANE BRASS PLUG DISC VALVES TAME POWER PLANT FLOW

In your boiler room—in lines where the service is really tough, you'll find these valves exactly right for the job to be done, right for the safety required. Use them for throttling, in soot blower, blow off, boiler feed, in drip and drain lines.

Crane brass plug type disc globe valves are extra strong and durable; they're made of a high grade steam metal. Their wide seating area is designed to resist the damaging effects of wire drawing and foreign matter. The disc taper assures tightness; permits easy regulation of flow.

Their discs of nickel-alloy and seats of exelloy are a tough combination that gives stubborn opposition to wear, wire drawing and galling.

Available in complete range of pressure ratings, these valves are ideal for Preventive Maintenance in a lot of services. For 300 pounds steam at 550°, ask your Crane Salesman about the popular No. 382 P.



CRANE

CRANE CO., GENERAL OFFICES
836 S. MICHIGAN AVE., CHICAGO
VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

HIDES AND SKINS

Packer native and branded steers sell off 1/4c and later recover 1/8c on trader buying; cows steady in light trade; 40,000 hides involved. Packers sell heavy calf steady; light calf slow.

Chicago

PACKER HIDES.—In a moderate movement, credited in good part to trader buying, packer native and branded steers sold off 1/4c early this week and later recovered 1/8c of the early loss; cows sold steady. Total sales so far reported are about 40,000 hides, while one packer is credited with selling quietly or booking around 10,000 more hides.

The spot market followed the somewhat erratic action of hide futures, which moved in sympathy with security markets, futures being at present 22@26 points under Thursday of last week.

While tanners show no anxiety to purchase hides, pending some up-turn in leather values, the trading in recent weeks has been sufficient to keep packers very closely sold up on winter kill and, as hides start to show seasonal improvement in quality around the middle of April, the demand should broaden, especially from buyers who cannot use the current quality of winter hides. Undoubtedly, everyone down the line, tanners, leather jobbers and shoe manufacturers, have all been working off accumulated inventory recently and packers count on the effect of this to bring better prices for summer hides with any up-turn in general activity.

A total of 11,500 Feb.-Mar. native steers sold at 12c, the Association selling 800 also at 12c, and 2,250 Mar. take-off moved later at 12 1/2c. One packer sold 1,000 Mar. extreme light native steers at steady price of 13 1/4c.

While no butt branded steers were reported in this market at 12c, sales were made that basis at New York; later, 1,600 Mar. butt brands sold at Chicago at 12 1/2c. A total of 8,500 Mar. Colorados went to trader buyers at 11 1/2c, and 2,800 Mar. sold later at 11 1/2c. Heavy Texas steers are quoted 12 1/2c nom.; there is a good demand for light Texas steers and they are readily salable at 11 1/2c, with 11 1/4c nom. usually quoted. One packer sold 1,100 extreme light Texas steers at 12c.

One lot of 1,600 Mar. heavy native cows sold early at 12c, steady. One packer sold 3,600 Mar. light native cows at 12 1/2c, and 2,900 Mar. branded cows at 12c, steady prices.

The Association sold 800 Feb.-Mar. bulls mid-week, at 9c for natives and 8c for branded bulls, or 1/2c under last packer sales.

Tanner interest appears quiet at the last paid prices for steers, registered at a time when futures were in a firm spot, but there are no lower offerings.

The final figures for the year, just

released, show production of shoes during 1939 at 424,136,411 pairs, an increase of 8.5 percent over the 1938 total of 390,746,226 pairs.

LATER: Association is credited with selling car Mar. heavy native cows at 11 1/2c; confirmation lacking.

OUTSIDE SMALL PACKER HIDES.

—Some sales of outside small packer all-weight natives were reported this week at 11 1/2c, selected, Chgo. freight, brands 1/2c less, for stock running around 48-lb. avge. Buyers quote 11 1/4@11 1/2c on this class of hides but apparently are unable to buy at 11 1/2c, 11 1/4c usually being asked. Bid of 11 1/4c was reported for some hides running 52-lb. avge., with seller asking 11 1/2c. Choice light stock would probably bring 12c.

PACIFIC COAST.—A sale of about 5,000 Vernon packer hides was reported late last week at 10 1/2c, flat, for steers and cows, f.o.b. Los Angeles. This week, about 6,000 Butchertown hides were reported at 10c for steers and 10 1/4c for cows, and some northern California small packer stock reported same basis. Later, a Vernon packer reported selling 1,000 Feb. steers and 1,900 Feb. cows at 10 1/2c, flat, for steers and cows, f.o.b. Los Angeles.

FOREIGN WET SALTED HIDES.

—The South American market was easier on a fair volume of business following the holidays. A pack of 4,000 LaPlatas sold early this week to Japan at 100 pesos, equal to about 14 1/4@14 1/2c, c.i.f. New York, steady on a peso basis with the last sale of standard steers two weeks back but variously figured in our funds, due to fluctuations in exchange rates. At mid-week, a total of 10,000 LaPlatas and 5,000 LaBlancas sold at 95 pesos, equal to 14 1/4@14 1/2c. Sales of 12,000 reject steers were also reported at 89 pesos or 13 1/4@13 1/2c, about 1 1/2c down from previous sale of rejects; 2,500 LaBlanca extremes equal to 15 1/2c.

COUNTRY HIDES.—Demand in the country hide market runs almost entirely to very light hides and trade is restricted by the lack of such offerings on any sizable scale. Untrimmed all-weights quoted 10 1/2@11c, selected, del'd Chgo.; some untrimmed stock around 48 lb. avge. sold at 10c, flat, Chgo., equal to about 10 1/2c, selected. Heavy steers and cows are quiet and nominal around 9@9 1/2c, flat, trimmed. There is not much call for trimmed buff weights and market quoted around 11 1/2c to possibly 11 1/4c, selected; buyers talk 11@11 1/4c. Trimmed extremes are quoted usually 13 1/4@13 1/2c, selected, but offerings are limited and 13 1/2c is probably obtainable for choice quality stock. Bulls listed 6 1/2@6 3/4c, flat. Glues around 8 1/2@9c, flat. All-weight branded hides quoted 9 1/2@9 3/4c, flat, trimmed.

CALFSKINS.—Steady prices were paid early this week for packer heavy calfskins 9 1/2/15 lb.; one packer sold two cars and another one car Mar.

northern heavy calf at 27 1/4c. Some River point Mar. heavies have been offered at 26 1/2c. Following the sale of Mar. light calf under 9 1/2 lb. late last week at 22 1/2c, 9,000 Milwaukee all-weight packer calf 15 lb. and down sold at 23 1/2c, or a cent differential over the lights. Demand continues to lag for the light calf and offerings at 22 1/2c not taken. Late this week, three packers sold a total of 8,300 Feb.-Mar. southern calfskins at 20c, construed as steady.

The spread between Chicago city light and heavy calfskins widened this week; two cars of 8/10 lb. calf sold at 18 1/2c, being 1/2c down from early asking price but 1 1/2c off from last actual sale; two cars 10/15 lb. were also reported at 24c, or 1/2c advance. Outside cities, 8/15 lb., nominal at 19@20c. Straight countries around 15@15 1/2c flat. Chicago city light calf and deacons quoted \$1.25 bid, with \$1.35 last paid and asked.

KIPSKINS.—At the close of last week, two packers each sold a car Feb. northern native kipskins at 19c, with brands included at 16c, steady prices. Early this week, one packer sold Mar. production of about 8,000, and another packer about 5,000 Mar. production, all basis 19c for northern natives, 18c for northern over-weights, southern a cent less, and 16c for branded kips, steady. A third packer removed Mar. production from the market quietly, and it was indicated that fourth packer had done likewise on all closed packs of Mar. kips.

Chicago city kips quoted around 17 1/2c nom., last reported paid in a carlot way, although a few are reported to have sold at 18c; none offered at present and 17 1/2c probably obtainable. Outside cities around 17@17 1/2c nom.; straight countries 14 1/2@15c flat.

All packers sold their Mar. production of regular slunks, totalling around 12,000, this week at \$1.05, or 5c down from Feb. price. Hairless have been moving around 60c.

HORSEHIDES.—There is a light trade passing in horsehides at about steady prices on a carlot basis, while buyers' ideas are 10@15c under these prices on an l.c.l. way. In a carlot way, good city renderers, with manes and tails, are quoted \$5.25@5.30, selected, f.o.b. nearby sections; ordinary trimmed renderers range \$5.00@5.10, del'd Chgo.; mixed city and country lots \$4.60@4.75, Chgo.

SHEEPSKINS.—Dry pelts quoted 15 1/2@16c per lb., del'd Chgo., inside price last paid for full wools. There is no appreciable increase as yet in shearing production but the run is expected to increase within the next few weeks; meantime, quotations are a little mixed. One house reports sale of a car this week at \$1.35 for No. 1's, 90c for No. 2's and 40c for No. 3's; there is talk of \$1.25, 75c and 37 1/2c possibly having been paid in another direction, while some offerings were made by one house at \$1.30, 80c and 40c for the three grades. Pickled skins appear firm and well sold up, with last reported sale at \$5.62 1/2 per doz. Mar. packer production, and earlier sales at \$5.50; pullers

talk up to \$6.00, and this is reported obtainable for blind ribbies, with ribbies quoted around \$5.00. Mid-western packer Mar. wool pelts quoted \$2.35@2.40 per cwt. live weight basis; outside small packer stock around \$2.10@2.20.

New York

PACKER HIDES.—There was further trading at the end of last week when a New York packer sold March steer production, natives and butt brands at 12½¢ and Colorados at 11½¢, steady with prices paid other packers earlier for first half Mar. production. Sales of 4,000 Mar. hides were reported early mid-week at 12¢ for native and butt branded steers and 11½¢ for Colorados; further sales of late Mar. hides later this basis finished Mar. production.

CALFSKINS.—The collector market was fairly active, with some irregularity in prices on the heavy end. Collectors sold 5,000 of the 4-5's at \$1.35, the asked price; 1,500 of the 5-7's sold at \$1.50@1.55; 5,000 of the 7-9's were reported at \$3.50@3.60. No packer sales reported, with last trading at \$2.85 for 7-9's and \$4.05 for 9-12's.

CHICAGO HIDE MOVEMENT

Receipts of hides at Chicago for the week ended March 23, 1940, were 5,420,000 lbs.; previous week 5,470,000 lbs.; same week last year, 5,065,000 lbs. Jan. 1 to date, 64,160,000 lbs.; same period last year, 66,245,000 lbs.

Shipments of hides from Chicago for week ended March 23, 1940, were 2,664,000 lbs.; previous week 4,154,000 lbs.; same week last year 3,865,000 lbs.; Jan. 1 to date, 52,230,000 lbs.; same period last year, 48,180,000 lbs.

TALLOW FUTURE TRADING

Mon., Mar. 25.—Close: May 4.70@4.90; July 4.75@4.95.

Tues., Mar. 26.—Close: May 4.70@4.90.

Wed., Mar. 27.—Close: May 4.70@4.90.

Thurs., Mar. 28.—Close: May and July 4.70@4.90.

Friday, Mar. 29.—Close: May and July 4.62@4.75.

CHICAGO PROV. SHIPMENTS

Provision shipments from Chicago for week ended March 23, 1940, were:

	Week Mar. 23	Previous week	Same week '39
Cured meats, lbs.	14,445,000	15,548,000	14,204,000
Fresh meats, lbs.	47,761,000	60,147,000	49,302,000
Lard, lbs.	2,308,000	2,183,000	2,009,000

MEAT AND LARD EXPORTS

Exports through port of New York during week ended March 28, totaled 2,415,450 lbs. of lard and 472,920 lbs. of bacon.

WEEK'S CLOSING MARKETS

FRIDAY'S CLOSING

Provisions

Hog products were moderately active and barely steady the latter part of the week, with investment demand satisfied by liquidation and hedging. Cash trade was moderate, unsettled outside markets being influential.

Cottonseed Oil

Cotton seed oil was weak on new season's lows, liquidation and local selling of stop-loss orders with dullness in cash demand, unsteady lard prospects, and small comparative March consumption. Cash interests expect March consumption to be less than 225,000 bbls. against 307,000 bbls. last year.

Quotations on bleachable cottonseed oil at close of market on Friday were: May, 6.50@6.53; July, 6.53@6.54; Sept., 6.55@6.56; Oct., 6.53@6.54; 138 lots; closing steady.

Tallow

New York extra tallow was quoted at 4½¢ lb.

Stearine

Stearine was quoted 6¢ lb.

Friday's Lard Markets

New York, March 28, 1940.—Prices are for export. Lard, prime western, 6.05@6.15¢, middle western, 6.00@6.10¢; city, 5½¢@5½¢; refined continent, 6@6½¢; South American, 6½¢@6½¢; Brazil kegs, 6½¢@6½¢; shortening 9¢.

CHICAGO HIDE FUTURES

Saturday, Mar. 23.—Close: Mar. 13.80 n; no sales; unchanged.

Monday, Mar. 25.—Close: Mar. 13.80 n; no sales; unchanged.

Tuesday, Mar. 26.—Close: Mar. 13.80 n; no sales; unchanged.

Wednesday, Mar. 27.—Close: Mar. 13.80 n; no sales; unchanged.

Thursday, Mar. 28.—Close: Mar. 13.80 n; no sales; unchanged.

Friday, March 29.—Close: May 13.90; 3 sales; closing 10 points higher.

NEW HIDE TRADING SCHEDULE

Governors of the Chicago Mercantile Exchange have voted to shorten by 90 minutes the week-day trading period in hide futures. The new schedule became effective on March 25. Under this trading schedule, contract trading in hides on Monday through Friday will close at 12:30 p. m. instead of 2 p. m. The Saturday closing hour remains unchanged at 11 a. m.

CHICAGO HIDE QUOTATIONS

Quotations on hides at Chicago for the week ended Mar. 29, 1940, with comparisons:

	Week ended Mar. 29	Prev. week	Cor. week, 1939
PACKER HIDES			
Hvy. nat. str.	@12½	@12½	@10½
Hvy. Tex. str.	@12½	@12½	@10½
Hvy. butt brnd'd str.	@12½	@12½	@10½
Hvy. Col. str.	@11½	@11½	@9½
Ex-light Tex. str.	@12	@12½	@9½
Brnd'd cows...	@12	@12	@9½
Hvy. nat. cows	@12	@12	@9½
Lt. nat. cows	@12½	@12½	@10½
Nat. bulls...	@9	@9½	@7½
Brnd'd bulls...	@8	@8½	@6½
Calfskins ...22½	@27½	@27½	@17½
Kips, nat...	@18	@18	@14½
Kips, ov-wt...	@18	@18	@13½
Kips, brnd'd...	@16	@16	@12½
Slunks, reg...	@1.05	@1.10	@80
Slunks, hris...	@60	@60	35 @40
Light native, butt branded and Colorado steers 1c per lb. less than heavies.			
CITY AND OUTSIDE SMALL PACKERS			
Nat. all-wts...	@12	@12	@9½
Branded ...11	@11½	@11	@8½
Nat. bulls...	@8	@8	@6½
Brnd'd bulls...	@7	@7	@5½
Calfskins ...18½	@24	@23½	@15
Kips ...17½	@18	@17½	@12½
Slunks, reg...	@95	@95	70 @75
Slunks, hris...	@50	@50	@80
COUNTRY HIDES			
Hvy. steers...	@9½	@9½	@7½
Hvy. cows...	@9	@9	@7½
Butts ...11½	@11½	@11½	@8½
Extremes ...13½	@13½	@13½	@10½
Bulls ...6½	@6½	@6½	@5½
Calfskins ...15	@15½	@16	@11
Kipskins ...14½	@15	@14½	@10½
Horsehides ...4.60	@5.30	@4.60	@5.30
SHEEPSKINS			
Pkr. shearls...	1.80@1.35	@1.35	@75
Dry pelts...	15½@16	15½@16	13½@14

NEW YORK HIDE FUTURES

Saturday, Mar. 23.—Close: Mar. 13.41; June 13.76@13.78; Sept. 14.02; Dec. 14.25 n; Mar. (1941) 14.48 n; 18 lots; 2 higher to 3 lower.

Monday, Mar. 25.—Close: June 13.72; Sept. 14.04@14.05; Dec. 14.28 n; Mar. (1941) 14.51 n; 17 lots; 4 lower to 3 higher.

Tuesday, Mar. 26.—Close: June 13.46; Sept. 13.72; Dec. 13.97 n; Mar. (1941) 14.23; 182 lots; 26@32 lower.

Wednesday, Mar. 27.—Close: June 13.70; Sept. 13.95@13.97; Dec. 14.20 n; Mar. (1941) 14.43 n; 160 lots; 20@24 higher.

Thursday, Mar. 28.—Close: June 13.55; Sept. 13.79; Dec. 14.02 b; Mar. (1941) 14.28; 119 lots; 15 to 18 lower.

Friday, March 29.—Close: June 13.87 @13.89; Sept. 13.65@13.66; Dec. 13.88 n; Mar. (1941) 14.10 n; 189 sales; 14@18 lower.

ARGENTINE BEEF EXPORTS

Cable reports of Argentine exports of beef this week up to March 28, 1940: To the United Kingdom, 101,112 quarters; to the Continent, 73,973 quarters. A week ago, to the United Kingdom, 39,943 quarters; to the Continent, 3,262 quarters.

In the News 40 Years Ago

(Continued from page 18.)

the prolonged Philippine rebellion growing out of it.

Last week's receipts of hogs were the smallest of the year, which is the principal reason for prices going so high. The top for the week was \$5.25, with the week's average price \$5.05. Last December the weekly average was as low as \$3.90. Average for the corresponding week in 1899 was \$3.75.

A gentleman named Bob Lee went to quod in default of \$2,000 bail for absconding with a ton of meat which didn't belong to him. Now in the Tombs in New York, he has lots of time to imagine how big 2,000 pounds of beef looks. It appears that he became beastly hungry the other morning, jumped on a truck at Reade st. and Broadway, gave lash to the team and "scorched" off until he was finally captured.

In the News 25 Years Ago

(From The National Provisioner, March 27, 1915.)

Effect of the European war on the food export trade of the United States are just beginning to show themselves in the export figures. Government estimates of exports for the month of February show that exports of foodstuffs, including breadstuffs, cottonseed oil, food animals, meat and dairy products, and cotton and mineral oils, amounted to \$163,597,709. This was an increase of more than \$85,000,000, or more than double the exports of February, 1914. Notwithstanding the abnormal increase in exports of foodstuffs during February, the total exports of these commodities during the eight months ending with February are \$15,000,000 under the total value of the same products exported during the same eight months of the year previous. This is because the trade slump which preceded this heavy war buying has not yet been overcome. Up to the time the depletion due to the ravages of war caused Europe to resume heavy purchases in this country, the United States was rapidly progressing the road toward becoming an importing nation rather than an exporting one, at least insofar as some lines of meat products were concerned. War needs turned the tide.

FLASHES ON SUPPLIERS

INTERNATIONAL SALT CO.—On April 1, according to an announcement by Edward L. Fuller, president, the International Salt Company will absorb four wholly owned subsidiaries, the International Salt Co., Inc., the Detroit Rock Salt Co., the Retsof Mining Co., and the Avery salt Co.

HAYS CORPORATION—Charles M. Chapman of Cincinnati has been appointed representative in the southern Ohio and nearby territories of Kentucky

and Indiana by the Hays Corp. of Michigan City, manufacturers of combustion instruments and automatic combustion controls. His headquarters are in the Schmidt bldg., Cincinnati.

A. E. STALEY MFG. CO.—Earnings of A. E. Staley Mfg. Co., producers of Soyflour and other corn and soybean products, advanced last year to the highest level since 1929, according to the company's annual stockholders' report. Net income for 1939 amounted to \$1,681,352, equal to \$3.24 per share. Increased volume was responsible for the larger profit as compared to 1938, reported A. E. Staley, chairman of the board.



NEW POLISH STYLE HAM

Kingan & Co.'s Krola brand Polish style ham, recently introduced to the trade, features a particularly colorful label incorporating authentic Polish motif. Advertising for this product at present is concentrated on point-of-sale material. The company hopes to extend its distribution soon to all principal cities in which it operates.

Defrosting Meats

(Continued from page 12.)

When bellies are to be defrosted quickly the water can be maintained at a temperature of 55 to 60 degs. F. Bellies are removed from the tank when internal temperature has reached 30 degs. F. Surface temperature at this time will be approximately 50 degs. If bellies are handled through subsequent operations in a room with a temperature of 36 to 38 degs. F., the temperature throughout the meat quickly equalizes at a point suitable for curing.

If desired, temperature of water in the tank may be held at 40 degs. F. and bellies will defrost in 3½ to 4 hours. The temperature of the cuts will be 35 to 38 degs. F. when they are removed from the tank. After draining for 30 minutes the bellies will be ready to go into cure.

Selling Liver Sausage

(Continued from page 21.)

and merchandising bulletin and urge them to make use of the ideas contained.

This promotion will pay dividends to salesmen exactly in proportion to the amount of energy, enthusiasm and effort they themselves put into it. The campaign belongs to the meat industry. It belongs to the retailers, the salesmen and the manufacturers. It features liver sausage; but every sausage item will benefit, since a push behind one product invariably carries increased sales of other products along with it.

The important point for salesmen to remember is that "you have to tell 'em to sell 'em."

BAKED HAM PROMOTION

Among the consumer advertising material which is helping to boost the popularity of the new ready-to-eat baked ham produced by the H. C. Bohack Co., Brooklyn, N. Y., are two illustrated four-page folders pointing out the features of the product and telling how to use it effectively.

One folder, entitled "Facts You'll Want to Know," explains how to carve a whole ham or half ham. The operations are simplified by means of drawings. The other folders tell how to prepare ham steak with mushrooms, Virginia baked ham and baked ham a la casserole.

TAMALES IN NEW PACKAGE

The consumer appeal of Wilson & Co.'s tamales in sauce, long a popular product, has recently been enhanced by the re-use value of Libbey Safedge tumblers, in which they are now being packed. Straight-sided round jars were formerly used. The new glass package shows off to advantage the fact that the sauce does not separate.

Wilson's tamales in sauce carry the seal of the Good Housekeeping Bureau in addition to the Certified label. The product is sealed with an Anchor T closure, produced by Anchor Cap & Closure Corp., and is easily opened with an ordinary hook opener. The tumblers are made by Owens-Illinois Glass Co.

FINANCIAL NOTES

The finance committee of Wilson & Co., Inc., has declared a dividend of \$1.50 per share on the \$6.00 preferred stock, to apply on accumulations for the period from November 1, 1938, to January 31, 1939. The dividend is payable May 15 to shareholders of record on May 1.

Quarterly dividend of 17½¢ has been declared on the preferred stock of United Stockyards. The dividend is payable April 15 to shareholders of record April 2.



It's a pleasure, sure enough, to sink your teeth in a slice of ham that practically melts in your mouth. But you're building up to a let-down if that first taste sensation isn't followed up by the full-bodied, mellow, genuine ham flavor.

It is not necessary, either, to slight flavor for the sake of tenderness. You'll obtain the best of both with the NEVERFAIL 3-Day Ham Cure. Tenderness, mildness, uniformity, and bright, eye-catching pink color, of course! But above all, flavor! When processed with the NEVERFAIL 3-Day Ham Cure your product has a taste-tempting, aromatic fragrance which cannot be obtained by any other process. It's Pre-seasoned! Actually, the flavor goes in with the cure . . . and is just as uniformly distributed throughout the entire ham.

See for yourself! Let us arrange a demonstration in your own plant. No cost or obligation. Write us!

"The Man Who Knows"



"The Man You Know"

NEVERFAIL

Pre-Seasoning



H. J. MAYER & SONS CO.

6819-27 S. Ashland Ave., Chicago, Illinois

Canadian Sales Office: 159 Bay St., Toronto Canadian Plant: Windsor, Ontario

LIVESTOCK MARKETS *Weekly Review*

Factors in Canada's New Hog Program

THE recent act of the Canadian government in placing a quota on imports of fresh pork from the United States has centered attention on Canadian hog production policies. The current expansion in hog production in Canada is not a temporary expedient but part of a permanent plan of the Canadian government to attain a more important position in the British market for pork products, according to a recent report from Ottawa.

Hog numbers in Canada on December 1, 1939, reached 4,770,000 and were 34 per cent larger than a year earlier. The increase in young pigs under six months was even greater than in total numbers, or 37 per cent. A still further increase is expected in the 1940 spring pig crop.

Even before the negotiation of the Anglo-Canadian bacon agreement of November 17, 1939, the Agricultural Supplies Committee had initiated an educational campaign stressing improvement of bacon quality and the question of regular supplies. On October 10 a proposed bacon-hog production campaign was submitted to each of the provinces recommending increased production in those areas where farmers had experience and where feed supplies were available.

Over-Supply of Pork Seen

Even if the United Kingdom takes all the bacon and hams stipulated in the Anglo-Canadian agreement, Canada appears to be faced with an over-supply of pork, notwithstanding the expanded export outlet. Increased consumption of pork products in 1940 is not likely to absorb the increased domestic supplies if hog prices are maintained at or above their present level.

Imports of United States fresh pork

into Canada in 1940, providing the present quota is continued beyond October, would exceed 19,524,000 lbs., owing to the large imports in January and February. The quota is based on imports of fresh pork for the first nine months of 1939. Imports for the calendar year 1939 totaled 21,957,000 lbs. In the last few years of the World War, imports of pork from the United States for the years ended March 31 were as follows: 1916—35,000,000 lbs.; 1917—59,000,000 lbs.; 1918—74,000,000 lbs.

In addition to the import quota on fresh pork, another method is effective in curtailing pork importations from the United States. A new order of February 20, 1940, denied the drawback of 99 per cent of the duties paid on exports of bacon, hams and other pork products to the United Kingdom and made it retroactive until November 18, 1939, the effective date of Anglo-Canadian bacon agreement, which specifies that bacon to be shipped shall be entirely of Canadian production.

The Anglo-Canadian bacon agreement provides for weekly shipments of 4,480,000 lbs. to 5,600,000 lbs. to the British Ministry of Food. This compares with a weekly average of all sources of 3,500,000 lbs. in each of the past two years.

KINDS OF LIVESTOCK KILLED

The percentage of each class of livestock slaughtered during February, 1940:

	Feb., 1940 Percent	Jan., 1939 Percent	Feb., 1939 Percent
Cattle—			
Steers	53.56	51.46	49.33
Bulls and stags..	3.58	3.74	3.93
Cows and heifers..	42.86	44.80	47.74
Hogs—			
Sows	46.93	45.51	44.38
Barrows	52.55	54.01	54.97
Stags and boars..	.32	.48	.65
Sheep and lambs—			
Lambs and yrags..	94.64	94.91	94.56
Sheep	5.36	5.09	5.44

TO REVIEW PORK PROBLEMS

Oscar G. Mayer, president, Oscar Mayer & Co., and Miss Inez S. Willson of the National Live Stock and Meat Board will participate in a discussion of various phases of the pork and lard situation to be held on April 12 at the University of Illinois College of Agriculture, in connection with the annual swine growers' day program.

Prof. E. J. Working, associate chief in agricultural economics at the university, will outline the economic situation with respect to lard and pork products, while Miss Willson will speak on "Why Mrs. America Should Increase Her Use of Lard." Mr. Mayer will discuss how the producer and packer can work together in meeting the lard and pork products problem.

Experiments now being conducted by the college on various swine breeding, feeding and management problems will be reviewed during the program. Results are also to be announced on a comparison of soybean oil meal fed alone as a protein supplement versus a mixture of the meal with tankage.

HOG KILL DECLINES

Hog slaughter in recent weeks has tended downward, with the kill under federal inspection during the first three weeks in March at 27 points totaling 2,085,619 hogs. During the first three weeks in February, hog slaughter totaled 2,229,869, while for the same period in January the total was 2,683,922. December slaughter under federal inspection numbered 3,010,862.

This decline is seasonal, however, for hog slaughter is still running above 1939 level, as it has since the new year began. The total hog kill for the year to March 23 numbering 9,537,636, compared with 6,899,637 during the like period in 1939.



A BULL'S EYE IN ALL LIVESTOCK CENTERS

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Livestock Buying Service

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CORN BELT DIRECT TRADING

(Reported by U. S. Department of Agriculture, Agricultural Marketing Service.)

Des Moines, Ia., March 28, 1940.—At 16 concentration points and 10 packing plants in Iowa and Minnesota hog trade was very uneven; prices ranged from 5c to mostly 10c up, but several bids were steady and some 15@20c higher. Loading was considerably less than 39,900 a week ago.

Good to choice, 180-220-lb., \$4.75@5.05, mostly \$4.90@5.00 at plants and \$4.75@4.85 at yards; 220-240-lb., \$4.65@5.00; 240-270-lb., \$4.50@4.85; 270-300-lb., \$4.30@4.70; 300-330-lb., \$4.25@4.55; 330-360-lb., \$4.05@4.40; 160-180-lb., \$4.25@4.90; sows 330-lb. down, \$3.95@4.25, mostly \$4.05@4.10 at plants; 330-400-lb., \$3.70@4.10; 400-500-lb., \$3.50@3.90.

Receipts at Corn Belt markets for week ended March 28.

	This week	Last week
Friday, Mar. 22.....	39,900	41,800
Saturday, Mar. 23.....	31,300	28,700
Monday, Mar. 25.....	43,900	35,000
Tuesday, Mar. 26.....	28,400	10,000
Wednesday, Mar. 27.....	28,000	28,500
Thursday, Mar. 28.....	19,000	40,700

NEW YORK LIVESTOCK

March 27, 1940

CATTLE:

Steers, good and choice, 1,471-lb....	\$ 10.25
Steers, medium, 1,227-lb.....	9.00
Cows, medium.....	5.75@ 6.25
Cows, cutter and common.....	5.00@ 5.50
Cows, canner.....	4.25@ 4.75
Bulls, good.....	7.00@ 7.50
Bulls, common.....	5.75@ 6.00

CALVES:

Vealers, good and choice.....	\$10.50@12.50
Vealers, common and medium.....	8.50@ 9.50
Vealers, culls.....	5.00@ 6.00

HOGS:

Hogs, good and choice, 208-226-lb....	\$ 5.25@ 5.50
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LAMBS:

Lambs	nominal
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Receipts of salable livestock at Jersey City public market, week of Mar. 23:

	Cattle	Calves	Hogs*	Sheep
Salable receipts.....	1,287	331	256	123
Total, with directs.....	5,549	9,779	24,742	38,515
Previous week:				
Salable receipts.....	1,962	222	324	7
Total, with directs.....	6,515	8,705	23,831	28,855

*Including hogs at 41st street.

LIVESTOCK SUPPLY SOURCES

Percentage of livestock slaughtered during February bought at stockyards and direct, is reported by the U. S. Department of Agriculture, Agricultural Marketing Service, as follows:

	Feb. 1940	Jan. 1939	Feb. 1939
Percent	Percent	Percent	Percent
Cattle—			
Stockyards	76.22	75.30	76.44
Other	23.78	24.70	23.56
Calves—			
Stockyards	61.29	61.59	64.81
Other	38.71	38.41	35.09
Hogs—			
Stockyards	47.33	47.06	49.64
Other	52.67	52.94	50.36
Sheep and lambs—			
Stockyards	62.06	60.21	67.42
Other	37.94	39.79	32.58

LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five leading Western Markets, Thursday, March 28, 1940, as reported by U. S. Department of Agriculture, Agricultural Marketing Service:

Hogs (soft & oily not quoted). CHICAGO NAT. STE. YDS. OMAHA KANS. CITY ST. PAUL

BARROWS AND GILTS:

Good-choice:					
120-140 lbs.	\$ 3.85@ 4.35	\$ 3.80@ 4.40	\$ 4.25@ 4.65	\$ 3.75@ 4.35	\$ 3.75@ 4.25
140-160 lbs.	4.25@ 5.00	4.30@ 4.90	4.50@ 4.85	4.15@ 4.75	4.00@ 4.60
160-180 lbs.	4.70@ 5.25	4.85@ 5.25	4.50@ 4.85	4.50@ 4.95	4.50@ 5.10
180-200 lbs.	5.10@ 5.35	5.15@ 5.25	4.75@ 4.90	4.80@ 5.05	5.00@ 5.10
200-220 lbs.	5.15@ 5.35	5.15@ 5.25	4.80@ 4.90	4.90@ 5.05	4.95@ 5.00
220-240 lbs.	5.15@ 5.35	5.00@ 5.25	4.75@ 4.90	4.90@ 5.05	4.85@ 4.95
240-270 lbs.	5.05@ 5.30	4.80@ 5.10	4.55@ 4.85	4.65@ 4.90	4.60@ 4.90
270-300 lbs.	4.95@ 5.15	4.70@ 4.85	4.45@ 4.75	4.60@ 4.80	4.50@ 4.60
300-330 lbs.	4.85@ 5.10	4.60@ 4.75	4.35@ 4.50	4.50@ 4.65	4.40@ 4.50
330-360 lbs.	4.65@ 4.90	4.50@ 4.65	4.25@ 4.40	4.40@ 4.55	4.25@ 4.40

Medium:					
100-220 lbs.	4.35@ 5.15	4.30@ 5.05	4.00@ 4.70	4.25@ 4.90	4.25@ 4.75

SOWS:

Good and choice:					
270-300 lbs.	4.50@ 4.70	4.50@ 4.65	4.10@ 4.25	4.15@ 4.25	4.00@ 4.10
300-330 lbs.	4.45@ 4.60	4.50@ 4.60	4.10@ 4.25	4.15@ 4.25	4.00@ 4.10
330-360 lbs.	4.40@ 4.50	4.45@ 4.55	4.00@ 4.15	4.10@ 4.20	4.00@ 4.10

Good:

360-400 lbs.	4.30@ 4.45	4.40@ 4.50	4.00@ 4.10	4.05@ 4.15	4.00@ 4.10
400-450 lbs.	4.20@ 4.40	4.25@ 4.45	4.00@ 4.10	4.00@ 4.10	4.00@ 4.10
450-500 lbs.	4.10@ 4.35	4.10@ 4.30	3.90@ 4.00	3.90@ 4.05	4.00@ 4.10

Medium:

250-500 lbs.	3.75@ 4.25	3.75@ 4.50	3.50@ 4.00	3.75@ 4.15	3.75@ 3.90
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PIGS (Slaughter):

Med. & good, 90-120 lbs.	3.10@ 4.15	3.35@ 3.85			3.00@ 3.75
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Slaughter Cattle, Vealers and Calves:

STEERS, choice:					
750-900 lbs.	11.25@12.50	10.50@11.50	10.50@11.50	10.00@11.25	9.50@10.50
900-1100 lbs.	11.25@12.50	10.50@11.50	10.50@11.50	10.00@11.25	9.75@10.75
1100-1300 lbs.	11.00@12.50	10.50@11.50	10.25@11.50	10.00@11.25	9.50@10.50
1300-1500 lbs.	10.75@12.50	10.25@11.50	10.00@11.50	9.75@11.00	9.50@10.25

STEERS, good:

750-900 lbs.	9.25@11.25	8.75@10.50	9.25@10.50	8.65@10.00	8.50@ 9.75
900-1100 lbs.	9.25@11.25	8.75@10.50	9.00@10.50	8.65@10.00	8.50@ 9.75
1100-1300 lbs.	9.00@11.00	8.50@10.50	8.75@10.25	8.65@10.00	8.50@ 9.75
1300-1500 lbs.	9.00@10.75	8.50@10.25	8.50@10.00	8.65@ 9.75	8.50@ 9.50

STEERS, medium:

750-1100 lbs.	7.50@ 9.25	7.75@ 8.75	7.75@ 8.75	7.75@ 8.65	7.00@ 8.50
1100-1300 lbs.	7.75@ 9.00	7.75@ 8.75	7.75@ 8.75	7.75@ 8.65	7.25@ 8.50

STEERS, common:

750-1100 lbs.	6.75@ 7.75	6.75@ 7.75	6.50@ 7.75	6.75@ 7.75	6.25@ 7.25
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STEERS, HEIFERS AND MIXED:

Choice, 500-750 lbs.	10.75@11.75	9.50@10.50	9.50@10.50	9.25@10.50	9.00@10.25
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Good, 500-750 lbs.	9.00@11.00	8.50@ 9.50	8.50@ 9.50	8.25@ 9.50	8.00@ 9.50
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HEIFERS:

Choice, 750-900 lbs.	9.75@10.75	9.25@10.50	9.25@10.25	9.00@10.00	8.85@ 9.65
Good, 750-900 lbs.	9.00@ 9.75	8.25@ 9.50	8.25@ 9.25	8.00@ 9.25	7.85@ 8.85
Medium, 500-900 lbs.	7.75@ 9.00	7.25@ 8.50	7.25@ 8.25	7.25@ 8.25	6.75@ 8.00
Common, 500-900 lbs.	6.50@ 7.75	6.25@ 7.25	6.00@ 7.25	6.25@ 7.25	5.75@ 6.75

COWS, all weights:

Good	6.75@ 7.25	6.50@ 7.00	6.50@ 7.00	6.50@ 7.00	6.15@ 6.75
Medium	5.75@ 6.75	5.75@ 6.50	5.50@ 6.50	5.75@ 6.50	5.75@ 6.15
Cutter and common	4.75@ 5.75	4.75@ 5.75	4.50@ 5.50	4.50@ 5.75	4.50@ 5.75
Canner (low cutter)	4.00@ 4.75	4.00@ 4.75	4.00@ 4.50	3.50@ 4.50	3.75@ 4.50

BULLS (Ylgs. Excl.), all weights:

Beef, good.....	6.25@ 6.75	6.35@ 6.75	6.25@ 6.75	6.35@ 6.75	6.25@ 6.50
Sausage, good.....	6.40@ 6.75	6.25@ 6.50	6.00@ 6.25	6.35@ 6.65	6.00@ 6.35
Sausage, medium.....	6.00@ 6.40	5.50@ 6.00	5.50@ 6.00	5.50@ 6.35	5.50@ 6.15
Sausage, cutter & com.....	5.50@ 6.00	5.50@ 6.00	5.00@ 5.50	5.00@ 5.50	4.75@ 5.50

VEALERS, all weights:

Good and choice.....	9.00@10.50	9.25@10.50	8.50@10.00	8.00@10.00	8.00@10.00
Common and medium.....	6.50@ 9.00	7.00@ 9.25	7.00@ 8.50	6.00@ 8.00	5.50@ 8.00
Cull	5.00@ 6.50	5.00@ 7.00	5.00@ 7.00	5.50@ 6.00	4.00@ 5.50

CALVES, 400 lbs. down:

Good and choice.....	7.50@ 8.50	7.75@ 9.25	7.50@ 9.00	7.25@ 8.50	8.00@10.00
Common and medium.....	6.00@ 7.50	6.25@ 7.75	6.00@ 7.50	6.00@ 7.25	6.00@ 8.00
Cull	5.00@ 6.00	5.00@ 6.25	5.00@ 6.00	5.00@ 6.00	4.50@ 6.00

Slaughter Lambs and Sheep:¹

LAMBS:					
Choice (closely sorted) ..	10.05@10.10				
*Good and choice.....	9.85@10.00	9.50@10.25	9.60@ 9.85	9.50@ 9.75	9.50@ 9.85
*Medium and good.....	9.00@ 9.75	8.50@ 9.25	9.25@ 9.50	8.50@ 9.25	8.75@ 9.25
Common	7.75@ 8.75	7.50@ 8.50	7.50@ 9.25	7.25@ 8.25	7.50@ 8.50

YEARLING WETHERS (shorn):

Good and choice.....	8.15@ 8.75				
Medium	7.25@ 8.15				

EWES (shorn):

Good and choice.....	4.50@ 5.50	4.25@ 5.25	4.25@ 5.35	4.25@ 5.25	4.75@ 5.50
Common and medium.....	3.25@ 4.50	2.75@ 4.25	3.25@ 4.25	2.25@ 4.25	3.00@ 4.75

¹Quotations based on animals of current seasonal market weights and wool growth.
*Quotations on slaughter lambs of good and choice and of medium and good grades, as combined, represent lots averaging within the top half of good and the top half of medium grades, respectively.

CHICAGO PACKER PURCHASES

Purchases of livestock at Chicago by the principal packers for the first three days this week were 18,001 cattle, 2,971 calves, 30,204 hogs and 14,542 sheep.

PACIFIC COAST LIVESTOCK

Receipts for 5 days ended Mar. 23:

	Cattle	Calves	Hogs	Sheep
Los Angeles	4,142	1,135	2,708	1,774
San Francisco	850	125	2,150	2,150
Portland	2,225	180	3,215	3,360

PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ending Saturday, March 23, 1940, as reported to The National Provisioner:

CHICAGO.

Armour and Company, 2,437 hogs; Swift & Company, 5,209 hogs; Wilson & Co., 5,479 hogs; Western Packing Co., Inc., 1,971 hogs; Agar Packing Co., 6,193 hogs; shippers, 4,793 hogs; others, 29,483 hogs.

Total: 28,646 cattle; 4,420 calves; 55,565 hogs; 53,947 sheep.

KANSAS CITY

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,721	602	3,367	6,101
Cudahy Pkg. Co.	1,375	586	1,677	4,364
Swift & Company	1,619	492	2,100	3,209
Wilson & Co.	1,323	570	1,909	4,041
Ind. Pkg. Co.	721	285	285	285
Kornblum Pkg. Co.	721	285	285	285
Others	2,382	398	3,711	6,071
Total	10,141	2,744	13,049	23,786

OMAHA

	Cattle	Calves	Hogs	Sheep
Armour and Company	4,286	8,254	4,777	
Cudahy Pkg. Co.	3,562	5,343	5,440	
Swift & Company	2,830	4,439	2,787	
Wilson & Co.	1,412	3,119	2,153	
Cattle and calves: Eagle Pkg. Co., 29; Greater Omaha Pkg. Co., 111; Geo. Hoffmann, 44; Lewis Pkg. Co., 511; Nebraska Beef Co., 525; Omaha Pkg. Co., 196; John Roth, 107; South Omaha Pkg. Co., 205; Lincoln Pkg. Co., 284; others, 7,824.				
Total	14,102	28,799	23,979	

EAST ST. LOUIS

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,584	1,394	5,153	4,180
Swift & Company	2,356	1,805	5,335	4,148
Hunter Pkg. Co.	1,398	222	2,779	1,027
Hell Pkg. Co.	2,073			
Krey Pkg. Co.	5,196			
Laclede Pkg. Co.	2,964			
Sleff Pkg. Co.	1,220			
Shippers	2,803	2,374	21,358	98
Others	2,611	158	3,032	815
Total	11,752	6,013	49,730	10,223
Not including 939 cattle, 2,921 calves, 15,596 hogs, and 718 sheep bought direct.				

ST. JOSEPH

	Cattle	Calves	Hogs	Sheep
Swift & Company	1,245	531	8,171	10,781
Armour and Company	1,517	568	7,255	6,286
Others	1,306	2	1,390	3,343
Total	4,068	1,101	16,816	20,410
Not including 3,323 hogs bought direct.				

SIoux CITY

	Cattle	Calves	Hogs	Sheep
Cudahy Pkg. Co.	2,174	74	11,141	3,776
Armour and Company	2,398	48	11,104	2,944
Swift & Company	2,092	52	6,378	2,229
Shippers	2,639	40	7,366	339
Others	249	25	48	2
Total	9,552	239	36,037	9,290

OKLAHOMA CITY

	Cattle	Calves	Hogs	Sheep
Armour and Company	1,339	465	2,625	1,490
Wilson & Co.	1,178	538	2,727	1,743
Others	280	29	2,081	
Total	2,797	1,032	7,433	3,233
Not including 20 cattle and 1,251 hogs bought direct.				

DENVER

	Cattle	Calves	Hogs	Sheep
Armour and Company	807	175	1,418	10,774
Swift & Company	766	157	1,311	7,693
Cudahy Pkg. Co.	784	67	1,321	2,673
Others	1,763	242	1,596	10,276
Total	4,122	641	6,146	30,416

FORT WORTH

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,167	609	4,251	4,179
Swift & Company	1,375	718	2,241	4,287
Blue Bonnet Pkg. Co.	154	15	1,135	14
City Pkg. Co.	180	15	604	
Rosenthal Pkg. Co.	87	13	61	
Total	4,135	1,370	8,432	8,471

ST. PAUL

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,975	3,125	18,062	2,875
Swift & Company	4,971	4,383	22,242	4,887
Riffin Pkg. Co.	719	34		
United Pkg. Co.	2,480	203		
Cudahy Pkg. Co.	608	2,232		
Others	2,468	1,320		
Total	14,279	11,297	40,394	7,562

WICHITA

	Cattle	Calves	Hogs	Sheep
Cudahy Pkg. Co.	796	731	2,078	4,685
Dold Pkg. Co.	443	70	1,049	9
Wichita D. B. Co.	8			
Dunn-Ostertag	51		183	
Sunflower Pkg. Co.	103		472	
Pioneer Pkg. Co.	28		449	
Interstate Pkg. Co.	175			
Keefe Pkg. Co.	89			
Total	1,748	801	4,231	4,694
Not including 2,394 hogs bought direct.				

INDIANAPOLIS

	Cattle	Calves	Hogs	Sheep
Kingan Co.	1,231	537	18,130	1,470
Armour and Company	937	242	2,313	
Hilgemeier Bros.	10		1,300	
Stumpf Bros.			159	
Meier Pkg. Co.	77	30	226	
Stark & Wetzel	119	26	450	
Wabnitz and Deters	38	77	393	
Maas Hartman Co.	18		1,722	
Shippers	2,291	1,734	17,128	877
Others	901	113	310	209
Total	5,692	2,770	40,309	3,498

CINCINNATI

	Cattle	Calves	Hogs	Sheep
S. W. Gall's Sons	12			170
E. Kahn's Sons Co.	496	412	7,523	353
Lohrey Packing Co.	2		223	
H. H. Meyer Pkg. Co.	7		3,959	
J. Schlachter's Sons	118	163		37
F. & F. Schroth P. Co.	29		2,903	
J. F. Stegner Co.	29		301	
Shippers	142	220	3,283	
Others	1,107	633	803	205
Total	2,178	1,765	18,694	771
Not including 827 cattle, 237 calves, 2,260 hogs and 621 sheep bought direct.				

RECAPITULATION

	CATTLE	Calves	Hogs	Sheep
Chicago	28,646	4,420	55,565	53,947
Kansas City	10,141	2,744	13,049	23,786
Omaha	14,102	28,799	23,979	
East St. Louis	11,752	6,013	49,730	10,223
St. Joseph	4,068	1,101	16,816	20,410
St. Paul	14,279	11,297	40,394	7,562
Sioux City	9,552	239	36,037	9,290
Okla. City	2,797	1,032	7,433	3,233
Wichita	1,748	801	4,231	4,694
Indianapolis	5,692	2,770	40,309	3,498
Cincinnati	2,178	1,765	18,694	771
Ft. Worth	4,135	1,370	8,432	8,471
Denver	4,122	641	6,146	30,416
St. Paul	14,279	11,297	40,394	7,562
Fort Worth	4,135	1,370	8,432	8,471
Total	116,586	116,216	128,727	

HOGS

	Cattle	Calves	Hogs	Sheep
Chicago	55,565	66,684	44,430	
Kansas City	13,049	12,812	7,191	
Omaha	28,799	46,182	31,449	
East St. Louis	49,730	55,656	41,924	
St. Joseph	16,816	19,160	10,821	
Sioux City	36,037	37,884	19,423	
Okla. City	7,433	6,011	9,505	
Wichita	4,231	4,510	5,180	
Denver	6,146	6,847	4,931	
St. Paul	40,394	55,357	27,920	
Milwaukee	7,883	10,160	8,595	
Indianapolis	40,309	43,706	32,188	
Cincinnati	18,694	19,237	20,050	
Ft. Worth	8,432	8,096	5,832	
Total	333,638	392,715	269,439	

SHEEP

	Cattle	Calves	Hogs	Sheep
Chicago	53,947	52,718	57,411	
Kansas City	23,786	23,717	24,213	
Omaha	15,157	16,500	22,051	
East St. Louis	10,223	5,539	6,078	
St. Joseph	20,410	23,473	23,084	
Sioux City	9,290	7,886	11,272	
Okla. City	3,233	2,821	3,280	
Wichita	4,694	3,434	4,969	
Denver	30,416	24,743	30,028	
St. Paul	7,562	7,758	9,721	
Milwaukee	1,209	1,091	859	
Indianapolis	3,498	4,607	5,459	
Cincinnati	1,765	1,726	1,541	
Ft. Worth	8,471	9,085	6,214	
Total	193,631	185,078	206,178	

*Cattle and calves.

†Not including directs.

CANADIAN INSPECTED KILL

Canadian inspected kill in February, 1940:

	Feb., 1940	Feb., 1939
Cattle	90,165	54,875
Calves	33,964	31,732
Hogs	385,065	245,004
Sheep	36,795	36,933

CHICAGO LIVESTOCK

Statistics of livestock at the Chicago Union Stock Yards for current and comparative periods.

RECEIPTS

	Cattle	Calves	Hogs	Sheep
Mon., March 18	10,980	998	22,161	15,596
Tues., March 19	6,335	2,342	11,729	5,802
Wed., March 20	6,247	790	18,321	7,482
Thurs., March 21	5,637	1,552	18,351	11,292
Fri., March 22	494	177	14,838	8,696
Sat., March 23	300		5,300	3,560
Total this week	29,983	5,876	89,378	53,160
Prev. week	35,812	5,555	104,789	56,877
Year ago	36,502	8,382	70,773	68,890
Two years ago	35,518	8,111	69,718	48,732

*Total this week... 29,983 cattle, 5,876 calves, 89,378 hogs and 53,160 sheep.

SHIPMENTS

	Cattle	Calves	Hogs	Sheep
Mon., March 18	2,546	15	2,090	5,440
Tues., March 19	2,272	7	590	2,195
Wed., March 20	2,412	16	544	693
Thurs., March 21	1,892	56	443	596
Fri., March 22	249	2	1,876	4,547
Sat., March 23			100	590
Total this week	9,371	96	5,563	18,781
Previous week	10,121	53	5,910	10,560
Year ago	9,241	415	4,349	10,062
Two years ago	9,632	685	5,638	18,144

*Including 418 cattle, 889 calves, 33,908 hogs and 3,900 sheep direct to packers from other points.

†All receipts include directs.

MARCH AND YEAR RECEIPTS

Receipts thus far this month and year to date with comparisons:

	March	
--	-------	--

SLAUGHTER REPORTS

Special reports to THE NATIONAL PROVISIONER show the number of livestock slaughtered at 16 centers for the week ended March 23, 1940.

	CATTLE		
	Week ended Mar. 23	Prev. week	Cor. 1939.
Chicago ¹	20,759	24,192	34,370
Kansas City ²	12,883	11,849	14,101
Omaha ³	14,265	14,448	16,175
East St. Louis	8,949	8,852	8,471
St. Joseph	4,565	4,856	4,505
St. Paul	7,179	6,251	7,059
Sioux City	2,549	2,360	3,386
Wichita ⁴	5,505	4,860	5,289
Fort Worth	1,776	1,840	1,852
Philadelphia	1,282	1,489	1,538
Indianapolis	8,324	9,052	8,639
New York & Jersey City	3,849	3,448	5,136
Oklahoma City ⁵	2,799	3,135	2,921
Cincinnati	3,982	3,705	4,320
Denver	11,145	10,050	12,471
St. Paul	5,154	5,138	5,832
Milwaukee	112,967	113,620	134,065

*Cattle and calves.

HOGS		
Chicago	107,383	100,363
Kansas City	33,735	27,891
Omaha	41,685	32,430
East St. Louis	62,800	57,333
St. Joseph	17,067	18,583
St. Paul	39,392	35,737
Sioux City	6,525	7,478
Wichita	8,432	8,096
Fort Worth	16,509	16,993
Philadelphia	18,767	18,741
Indianapolis	46,475	47,860
New York & Jersey City	5,584	7,813
Oklahoma City	15,189	16,469
Cincinnati	6,294	6,613
Denver	40,334	55,357
St. Paul	7,862	10,534
Milwaukee	477,133	465,897

¹Includes National Stock Yards, East St. Louis, Ill., and St. Louis, Mo.

SHEEP		
Chicago ¹	35,341	37,034
Kansas City	23,786	23,717
Omaha	17,368	22,107
East St. Louis	10,165	5,530
St. Joseph	17,067	18,968
St. Paul	9,216	8,561
Sioux City	4,694	3,434
Wichita	8,471	9,065
Fort Worth	2,244	2,336
Philadelphia	1,674	1,856
Indianapolis	35,141	48,949
New York & Jersey City	3,233	3,321
Oklahoma City	1,186	1,775
Cincinnati	6,107	5,453
Denver	7,562	7,758
St. Paul	1,200	1,091
Milwaukee	204,464	201,064

†Not including directs.

RECEIPTS AT CHIEF CENTERS

Receipts for week ended March 23:

At 20 markets:			
	Cattle	Hogs	Sheep
Week ended March 23	160,000	415,000	238,000
Previous week	165,000	480,000	254,000
1939	184,000	337,000	293,000
1938	200,000	260,000	246,000
1937	173,000	300,000	246,000
At 11 markets:			
	Cattle	Hogs	Sheep
Week ended March 23	362,000	415,000	270,000
Previous week	362,000	415,000	270,000
1939	362,000	415,000	270,000
1938	362,000	415,000	270,000
1937	362,000	415,000	270,000
1936	362,000	415,000	270,000
At 7 markets:			
	Cattle	Hogs	Sheep
Week ended March 23	116,000	303,000	164,000
Previous week	115,000	355,000	176,000
1939	132,000	221,000	161,000
1938	128,000	192,000	159,000
1937	110,000	182,000	134,000
1936	142,000	212,000	124,000

CANADIAN EXPORTS TO U. S.

Exports to United States in February, 1940:

	Feb., 1940	Feb., 1939
Cattle, no.	5,059	9,275
Calves, no.	3,375	3,426
Hogs, no.	2	4
Sheep, no.	11	210
Beef, lbs.	22,600	108,700
Bacon and ham, lbs.	35,900	44,200
Pork, lbs.	108,500	114,900
Canned Meat, lbs.	271	12

MEAT SUPPLIES AT EASTERN MARKETS

(Reported by the U. S. Department of Agriculture, Agricultural Marketing Service)

WESTERN DRESSED MEATS

	NEW YORK	PHILA.	BOSTON
STEERS, carcass			
Week ending March 23, 1940	8,527½	2,259	2,206
Week previous	8,498½	2,446	2,500
Same week year ago	9,572	2,449	2,376
COWS, carcass			
Week ending March 23, 1940	716	887	2,369
Week previous	841	1,021	2,343
Same week year ago	1,830	1,387	2,399
BULLS, carcass			
Week ending March 23, 1940	284	436	10
Week previous	304	535	15
Same week year ago	350	382	22
VEAL, carcass			
Week ending March 23, 1940	9,268	1,063	923
Week previous	13,065	1,609	848
Same week year ago	12,487	1,635	778
LAMB, carcass			
Week ending March 23, 1940	33,021½	12,788	15,778
Week previous	42,813	12,963	17,877
Same week year ago	40,147	18,186	15,360
MUTTON, carcass			
Week ending March 23, 1940	1,662	351	946
Week previous	2,304	456	1,204
Same week year ago	1,459	234	445
PORK CUTS, lbs.			
Week ending March 23, 1940	2,122,351	465,797	308,909
Week previous	2,569,810	437,852	454,087
Same week year ago	2,262,572	397,100	347,490
BEEF CUTS, lbs.			
Week ending March 23, 1940	238,242	.....	.....
Week previous	451,931	.....	.....
Same week year ago	476,471	.....	.....

LOCAL SLAUGHTERS

CATTLE, head	Week ending March 23, 1940	8,324	1,776
	Week previous	9,052	1,940
	Same week year ago	8,639	1,852
CALVES, head	Week ending March 23, 1940	13,970	1,904
	Week previous	12,945	2,371
	Same week year ago	13,285	2,870
HOGS, head	Week ending March 23, 1940	46,475	16,509
	Week previous	46,955	16,993
	Same week year ago	50,029	18,951
SHEEP, head	Week ending March 23, 1940	55,141	2,244
	Week previous	48,949	2,336
	Same week year ago	58,979	3,089

Country dressed product at New York totaled 4,904 veal, 5 hogs and 3,993 lambs. Previous week 6,500 veal, 5 hogs and 388 lambs in addition to that shown above.

WEEKLY INSPECTED KILL

Number of animals processed in 27 selected centers for week ended March 22, with comparisons:

	Cattle	Calves	Hogs	Sheep
New York Area ¹	8,324	13,946	45,664	55,589
Phila. & Balt.	2,784	1,075	29,454	1,589
Ohio-Indiana	.....	.....	.....	.....
Group ²	6,921	3,968	49,331	5,590
Chicago	22,538	8,409	107,383	45,931
St. Louis Area ³	9,211	6,795	62,800	8,765
Kansas City	9,671	4,791	33,735	19,325
Southwest Group ⁴	4,984	38,991	32,136	.....
Omaha	12,829	1,356	41,685	21,516
Sioux City	6,447	233	39,392	10,519
St. Paul-Wisc.	.....	.....	.....	.....
Group ⁵	19,387	33,363	114,650	10,314
Interior Iowa & So. Minn. ⁶	14,109	6,586	100,340	34,908
Total	123,414	85,506	723,425	246,385
Total prev. week	123,427	70,863	669,888	228,641
Total last year	133,866	81,262	500,439	266,652

¹Includes New York City, Newark, and Jersey City. ²Includes Cincinnati and Cleveland, Ohio, and Indianapolis, Ind. ³Includes National Stockyards and East St. Louis, Ill., and St. Louis, Mo. ⁴Includes So. St. Joseph, Wichita, Oklahoma City, and Ft. Worth. ⁵Includes St. Paul, Minn., Madison, and Milwaukee, Wisconsin. ⁶Includes Albert Lea and Austin, Minn., and Cedar Rapids, Des Moines, Ft. Dodge, Mason City, Marshalltown, Ottumwa, Storm Lake, and Waterloo, Iowa.

Packing plants included in above tabulation slaughtered in March and April, 1939, approximately seventy-five per cent of the cattle, seventy-two per cent of the calves, seventy-three per cent of the hogs, and eighty-three per cent of the sheep and lambs slaughtered under Federal inspection in that two months period.

Careless work in hog scalding costs money. Read "PORK PACKING," The National Provisioner's pork handbook.

CANADIAN LIVESTOCK PRICES

SHEEP			
	Week ended Mar. 21	Last week	Same week 1939
Toronto	\$ 7.50	\$ 7.50	\$ 7.75
Montreal	7.75	7.75	7.75
Winnipeg	7.00	7.00	7.50
Calgary	6.75	7.00	7.00
Edmonton	6.75	6.75	7.00
Prince Albert	6.25	.....	.....
Moose Jaw	6.50	6.50	6.50
Saskatoon	6.50	6.75	7.00
Regina	6.50	6.50	6.75
Vancouver	7.25	7.00	6.50
VEAL CALVES			
Toronto	\$11.50	\$11.50	\$10.50
Montreal	11.00	11.00	8.50
Winnipeg	9.50	9.50	8.50
Calgary	9.00	9.25	8.00
Edmonton	9.50	10.00	7.50
Prince Albert	.....	7.75	.....
Moose Jaw	.....	7.00	.....
Saskatoon	9.50	7.50	7.50
Regina	10.50	9.50	8.00
Vancouver	9.00	8.50	7.50
BACON HOGS			
Toronto	\$ 9.00	\$ 9.10	\$ 9.50
Montreal	9.40	9.40	9.75
Winnipeg	8.60	8.60	9.50
Calgary	8.00	8.50	9.10
Edmonton	8.50	8.55	9.10
Prince Albert	8.30	8.30	9.25
Moose Jaw	8.35	8.35	9.35
Saskatoon	8.50	8.50	9.25
Regina	8.35	8.35	9.35
Vancouver	8.65	8.65	9.25
¹ Montreal and Winnipeg hogs sold on a "F. & W." basis; all others "off trucks."			
GOOD LAMBS			
Toronto	\$11.15	\$11.00	\$ 8.90
Montreal	10.00	10.00	8.50
Winnipeg	9.50	9.25	8.25
Calgary	8.00	8.50	7.25
Edmonton	8.75	8.75	7.75
Prince Albert	8.00	.....	.....
Moose Jaw	.....	7.00	.....
Saskatoon	8.50	7.00	7.00
Regina	8.35	7.85	7.85
Vancouver	13.00	.....	.....

NEW EQUIPMENT *and Supplies*

CAN VACUUMING HOOD

As the number of packers who can hams increases and the volume of this product expands, the need grows for equipment to carry on operations efficiently and economically.

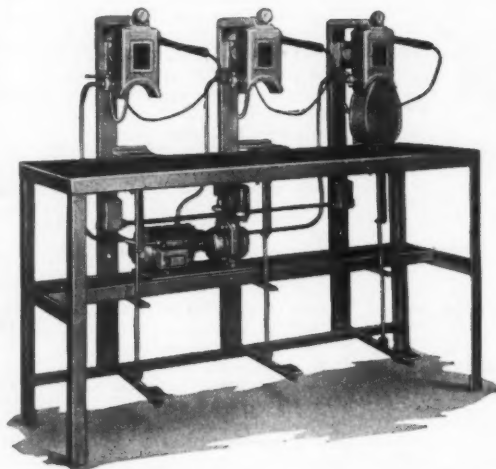
A late equipment development for the ham canner is the hydraulic ham press. This machine, built by the Griffith Laboratories, has been illustrated and described in earlier issues of THE NATIONAL PROVISIONER. It is a self-contained unit with which the canner can place the boned, S.P. ham in the can without pre-cooking and thus save pre-cooking shrink. The press not only presses and forms the ham to the shape of the can under a pressure of 250 lbs. per sq. in., but prevents distortion of the can and obviates difficulties at the closing machine. The press can be adjusted by special collars and plungers for cans of varying height.

Still another recent Griffith development for the ham canner is the Vacuum Hood Unit, a simple device for exhausting ham cans. The unit is mounted on a table, under which is an air cooled vacuum pump operated by a $\frac{1}{2}$ -h.p. motor. Three hoods and a table constitute a unit, which is operated by one man. Operations are controlled by foot levers. The operator presses down a foot lever, places a can on the platform and releases the pressure. The small end of the can is thereby pushed firmly against the hood, exhausted and sealed.

The following advantages are claimed for the device: It will get all of the air pockets out of the can; the can will not bulge; a 28-in. vacuum can be drawn; the can cannot be closed if it is a leaker; canning line production is speeded up.

Canned hams continue to grow in popularity, and the considerable reduc-

tion in importations has materially stimulated production of this product in the United States. The American packer can produce a canned ham that surpasses the imported product, Griffith executives say, if the proper methods are employed. The company is prepared to assist with canning problems.



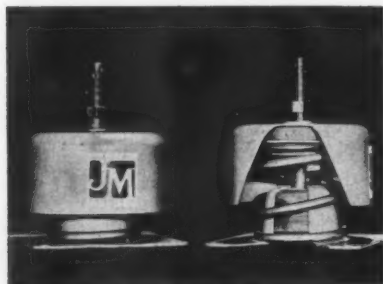
SPEEDY CANNED HAM VACUUMING DEVICE

The cold pack method of canning hams, advocated by the Griffith Laboratories, is said to save considerable shrink and to lessen the average gelatin content in the can. Cooking temperatures also play an important part in the production of high quality canned hams, Griffith executives say. It is quite important, therefore, that proper cooling schedules be followed.

VIBRATION ISOLATOR

An easily installed vibration isolator, designed to control machine vibration and reduce resulting noise, has been announced by Johns-Manville. Known as the J-M Controlled Spring Isolator, the device was developed for use on the bases of motors, generators, pumps, ventilating fans, and similar equipment where vibration and excessive motion create noise and wear out machine parts, damage connections and crack supporting walls and floors.

Working parts consist of a coil spring and a rubber load pad, which support the equipment and isolate vibration, and an adjustable rubber snubber inside the base, which controls excessive motion. Through combination of these parts, the manufacturer states, the isolator provides the high compliance necessary for good isolation and the control needed to limit motion in equipment.



VIBRATION ISOLATOR

The isolator was built to reduce horizontal, torsional, and vertical vibration, and tests by the J-M research laboratories indicate it is particularly efficient for low frequency vibrations resulting from slow speeds and from operations involving reciprocal action. Load pad is designed to overcome any high frequency vibrations.

Isolator is made in two sizes: Light duty, for loads from 60 to 190 lbs. per isolator; and heavy duty, for loads from 250 to 720 lbs. per isolator. Heavy machines may be isolated by clusters of units. Loaded overall dimensions of the isolator are 6 in. by 6 in. and approximately 3 $\frac{1}{4}$ in. high. It is enclosed in a metal jacket which protects rubber parts from oil and light.

NARROW AISLE LIGHTING

Increased lighting efficiency and greater protection against glare are said to be provided by the improved Stocklite fixture, announced by the Goodrich Electric Co., Chicago. The odd shape of this fixture is dictated by the peculiar purpose for which it is designed: To direct the light in stock bins so that proper illumination is obtained from top to bottom shelf and into bin interiors. The curved "V"-shaped flanges prevent aisle glare and at the same time direct light to the sides where the utmost intensity is desired. Properly spaced, the fixtures provide uniform illumination throughout without "spottiness."



ANTI GLARE LIGHT

A slight change in contour, with an increase in the size of this fixture, has resulted in greater efficiency. The larger reflecting surface now assures utilization of the lamp's full intensity, enabling stock clerks to read typewritten slips, part numbers, etc., with ease anywhere in the aisles.

The fixture is finished in permanent white porcelain enamel inside and out, and it is claimed it is not affected by the most adverse atmospheric conditions. It is available with pendant, right-angle, feed-thru or outlet-box mounting.



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CANNED FOODS**

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Classified ADVERTISEMENTS

Advertisements on this page, \$3.00 an inch for each insertion. Position Wanted, special rate, \$2.00 an inch for each insertion. Minimum Space 1 inch, not over 48 words, including signature or box number. No display. Remittance must be sent with order.

Position Wanted

Sales Manager, Provision Man

A packinghouse man with 25 years experience in plant and sales management desires new connection. Have thorough knowledge of plant operations, sales promotion and product costs. Can efficiently handle management of small or medium sized plant. Excellent record, honest, reliable and not afraid of hard work. Age 45, now employed. Interview appreciated. W-823, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Dry Rendering Operator

Position wanted by dry rendering operator with steam engineer's license. Can operate plant economically and get results. Produce quality products. Several years' experience, packing house and dead stock. Married, age 32. Prefer Central States. Best references. W-837, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Credit Manager Or Assistant

Young man, with ten years packinghouse experience, desires to make connection with a progressive packer where there is an opportunity for an ambitious worker. Experienced also in accounting procedure. Reasonable salary. Age 35, married. W-842, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Plant Superintendent

37 years of age, married, 20 years experience with large packers, good personality. Supervised all processing and slaughtering operations, figured costs, etc. Fully competent to handle all departments and men. Can furnish best reference. Write W-824, THE NATIONAL PROVISIONER, 627 Mills Bldg., San Francisco, Calif., for full information.

Canning Room Foreman

Expert in all canned meat manufacture, also specialist on canned hams. Proper yields and low costs assured. Best of references. Write Box W-849, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Assistant Superintendent

Has thorough knowledge of plant operations, cost, and yields. Experience gained with progressive packers. Technically trained and can reduce costs. Well liked, young and capable. Available at once. Box W-850, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Sausage Foreman

Experienced sausage foreman desires position. Prefers east. 36 years of age, married. Write Box W-851, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Personnel Manager

Experienced in employment, payroll and purchasing work, also supervision of storerooms. Eight years experience with both large and small packers. Can give best of references. Willing to go anywhere. Carmen LaMonte, 3112 W. 67th St., Chicago, Ill.

Men Wanted

Assistant Sales Dept. Manager

Young man with several years meat packing house experience, particularly in casing department, with practical and selling knowledge to act as assistant sales department manager. Reply fully, stating age, religion, salary expected. Replies confidential. Box W-852, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Business Opportunities

Cooler Space

Desirable cooler space for rent in the heart of the Westchester-Brook Avenue market. For particulars write or call: I. TEITELBAUM
45 West 45th St. Bryant 9-4515
New York City

Packing Plant

For Sale: An up to date Meat Packing Plant fully equipped, also trucks. If interested get in touch with Al Schuesselin, 902 W. North St., Piqua, Ohio.

Run Yards And Plant

Would be interested in contacting party or parties interested in operating stock yards together with small packing plant and cold storage lockers in Southern Alabama. W-843, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Equipment Wanted

Rendering Machinery

Wanted for user, Hydraulic Curb Press and Pump; Rotary Dryer; Kettles; 2-Filter Presses; Evaporator; Cooker; Lard Cooling Roll. What have you to offer. W-718, THE NATIONAL PROVISIONER, 300 Madison Ave., New York City.

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1—Brecht Enterprise No. 156 Grinder.
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Boilers, Generator Sets, Power Plant Equip.
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The Bunn Tying Machine

is used very generally by packers for tying sausage boxes, bacon squares, picnics, butts, etc. Ties 20-30 packages per minute. Saves twine. Write for our 10-day free trial offer. B. H. Bunn Co., 7609 Vincennes Ave., Chicago, Ill.

For Sale

STUFFER: One 250-lb. Buffalo Stuffer. Price \$250.00 f.o.b. Wilmington. Will ship on approval, six months to pay. WILMINGTON PROVISION COMPANY, Wilmington, Delaware.

Shop Here

An advertisement placed in this space will bring you that piece of equipment or machinery you are in need of—as soon as you need it. For details, write THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

Wilmington Provision Company
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*Slaughterers of Cattle, Hogs,
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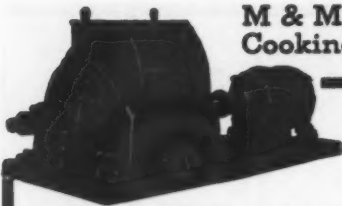


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COSTS**—Grinds fats,
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equal facility. Red-
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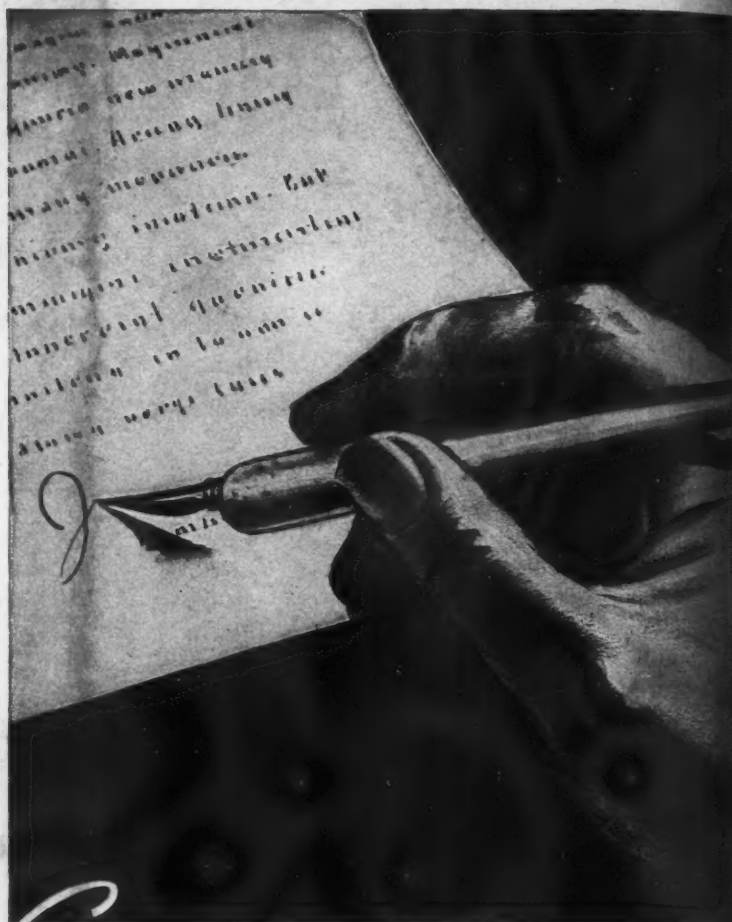
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